Automotive

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news

Ex-Hyundai exec to lead Kia

LOS ANGELES — Former Hyundai executive Greg Warner has been appointed to lead Kia Motors Corp.'s sales entry into North America.

Warner, 48, who left Hyundai to form his own consulting company in 1989, was named Friday as executive vice president and chief operating officer of Kia's North American operations.

The company, based in Irvine, Calif., will be responsible for the sale of Kia-badged vehicles in the United States and Canada. It plans to begin sales in mid-1993 with a compact sedan and follow with a compact sport-utility six months later.

Kia is the second Korean automaker, after Hyundai Motor Corp., to create an independent U.S. sales channel. Ford Motor Co. currently sells a Kia vehicle as the Ford Festiva.

— Kristine Stiven Breese

Lexus, Saturn dealers happiest

Newcomer Saturn Corp. received the second-highest score in the J.D. Power and Associates Dealer Satisfaction Index for 1991, making Saturn far and away the highest-scoring domestic franchise.

Lexus, a division of Toyota Motor Sales U.S.A. Inc., was a repeat winner.

see LATE NEWS, 2

Economy KO'd 1,588 dealerships, NADA says

CHARLES M. THOMAS
Staff Reporter

A lengthy and stubborn recession has taken its toll on the nation's new-car dealers, shuttering 1,588 dealerships since 1989, according to the National Automobile Dealers Association.

And even though dealers are operating their businesses more efficiently than ever before, they aren't out of the woods yet, warns Frank McCarthy, NADA executive vice president.

He said the last recession, from 1979 to 1981, was harder on dealers because about 1,800 dealerships closed.

But he cautioned that this recession isn't over yet, and "we're still counting."

According to NADA membership data, the dealership total at the end of 1991 was 23,553, down from 24,198 a year earlier. Dealer members of NADA slipped to 19,065 in 1991 from 19,877 in 1989.

McCarthy also said that the net loss of dealerships could be worse than NADA figures show. That's because dealership closings estimated by NADA may be skewed by the addition of dealerships for new franchises like Lexus, Saturn and Infiniti.

see DEALERS, 35

'Buy U.S.' fever spreads

Businesses offer incentives, but few gains are expected

ARLENA SAWYERS
Staff Reporter

A year ago, patriotic fever swept Americans during the Gulf War.

This year, the war is economic. And the fever is "Buy American."

At least, that's what a number of companies are suggesting to their employees.

The persistent recession and the escalating war of words between the United States and Japan have prompted some American businesses to come to the aid of the American automobile industry.

Several businesses are offering cash incentives to their employees or customers who buy or lease "American" vehicles.

At The Brown Paper Co. in Greenwich, Conn., employees are offered $1,000 to buy a U.S.-built vehicle from the Big 3.

Company President Douglas Brown himself replaced his Audi with a 1992 Cadillac Seville STS.

HANS G. LEHMANN/HIDDEN IMAGE

Toyota has reportedly delayed introducing this mid-sized pickup truck to the U.S. market for fear of provoking more anti-Japanese sentiment. Work continues on the truck, which is similar in dimensions to the Dodge Dakota.

Companies — both automotive and non-automotive — are offering up to $1,000 toward the purchase or lease of American cars.

One complication: What's an American vehicle?

Companies are defining domestic vehicles as assembled in the United States or North America, or bearing a Big 3 nameplate. Some programs include and others exclude Hondas or Toyotas assembled in America.

The "Buy American" movement is biggest in Detroit and the Midwest, heart of the Big 3.

Will the "Buy American" movement move the needle?

Some consumer surveys taken at the time of the Persian Gulf war suggested that Americans, taken with the patriotism of the war and angered at Japan's lukewarm support for it, might move back to domestic products. But Japanese makers picked up 1.7 points of U.S. market share in 1991.

"Buy American" programs are largely emotional and do little to change consumers' minds, says John Casesa, an automotive analyst with the New York brokerage firm of Wertheim Schroder & Co.

"It may have a temporary positive effect on Big 3 market share, but it will be fleeting," he says. "There is still a quality gap. The market is a reflection of reality."

see BUY U.S., 6

Pensions don't boost costs of Ford and GM vehicles

Retiree checks financed by shrewd investments

Big payouts await Big 3 chiefs ➤ 16

MICHAEL J. CLOWES, MARGARET PRICE and CURTIS VOSTI
Crain News Service

U.S. auto companies have at least one model the Japanese carmakers might well emulate — their pension investment operations.

So successful have General Motors and Ford Motor Co. been in their pension fund investments, aided by the strong financial markets of the past decade, that pension payments don't add a single dollar to the cost of a U.S.-built GM or Ford car. Pension costs can add as much as $87 to the cost of a car built in Japan.

Chrysler Corp., hampered by its financial difficulties, its acquisition of American Motors and its one-to-one ratio of pensioners to active employees, still contributes to its fund.

Chrysler is at a competitive disadvantage because pension costs add $585 to the cost of a Chrysler vehicle. But Chrysler's fund also has excellent long-term investment returns.

While the Big 3 have been subjected to ridicule in the nation's media in recent weeks, they have in the last decade quietly become cutting-edge national leaders in an often-overlooked but big-dollar enterprise: managing billions of dollars in pension funds.

GM, Ford and Chrysler, which have 768,000 employees, have accumulated assets with a market value of $57.6 billion to meet their current and future pension obligations. In addition, they have another $11.7 billion for various employee-funded thrift plans; a 401(k) deferred-compensation, tax-sheltered savings plan, and other employee benefit programs.

In the profitable years of the 1980s, Ford and GM contributed generously to the pension funds so they wouldn't have to fund in bad years. That plan worked well. But Chrysler wasn't able to fund its plan as aggressively. They have invested these assets

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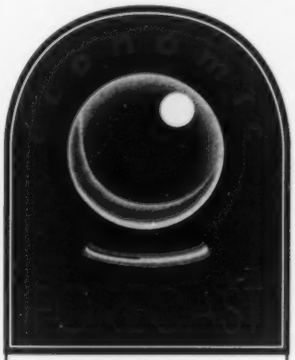

Wary analysts expect '92 sales to rise

Stories on Page 20.

Mood has switched: Congress now seeks to aid auto industry

MAX GATES
Staff Reporter

WASHINGTON — Washington goes back to work this week with a new attitude toward the nation's auto industry.

When Congress adjourned before Thanksgiving, it had just passed a highway bill that included new auto safety standards and narrowly turned aside debate on new corporate average fuel economy rules.

Bryan: Looking for ways to push CAFE bill.

Now, CAFE is considered dead for this year by nearly all except its chief sponsor, Nevada Democrat Sen. Richard Bryan.

President Bush is reportedly ready to launch a broad attack on federal regulations that add to the costs of business and manufacturing. And there is widespread recognition that the domestic auto industry is critical to the U.S. economy — and both are in trouble.

The shift stemmed from two dramatic events: The

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Automotive News

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correction

A photo caption in the Jan. 13 edition misstated Mercedes-Benz's production goal for its new SEC coupes. The company said it will produce 8,000 of the new cars for world markets in 1993 — 3,500 units of the 500SEC and 4,500 600SECs. The American market will receive a combined 1,500 units of both models.

HANS G. LEHMANN/HIDDEN IMAGE

Hyundai tests topless Scoupe

Korean automaker Hyundai hopes to broaden the appeal of its Scoupe with a turbocharged version for the 1993 model year and a convertible, as shown in this retouched photo of a prototype, for the 1994 model year. Other changes include a minor facelift with new grille, narrower headlights and rounded fenders.

latenews

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No. 3 was Infiniti Division of Nissan Motor Corp. in U.S.A. Like Saturn, this is the first year it has been ranked. The survey asks dealers about the value of the franchise, company policies and procedures and how well dealers get along with franchise representatives.

The next positions were held by Range Rover, Honda and Mercedes-Benz (tied), Toyota, Audi, Acura and Saab (tied), Mitsubishi and Mazda.

After Saturn, the highest-ranking domestic franchise was Buick in 17th place. J.D. Power and Associates doesn't publish below-average scores.

— Jim Henry

Lotus lays off another 70

LONDON — Lotus Cars Ltd., the British sports car maker, said Friday it will lay off another 70 workers because of sharply declining sales. The company, which added staff in 1989 and 1990 for production of the then-new Elan, laid off 300 workers last September as sales fell 60 percent.

The company said Elan sales have fallen sharply below target, especially in the United States, its principal market.

The latest cuts will leave the company with about 500 workers, Lotus said. A spokesman said the company will build about 2,000 cars in 1992.

— Ed Wendt

GM recalls cars, trucks

DETROIT — General Motors last week announced three safety recalls involving 214,500 cars and light trucks.

An incorrect machining operation may cause the automatic transmissions in 9,500 1992 cars to engage while the shift lever is in neutral. Affected are Oldsmobile Cutlass Supremes and Cieras, Buick Regals and Centurys, Pontiac Grand Prixs and Chevrolet Luminas.

A second recall involves about 186,000 1985 and 1986 Chevrolet and GMC Truck one-ton C/K pickups and G-30 vans, which could develop cracks in their left-side lower control arms. The crack could spread to the ball joints, causing a loss of steering control.

Another recall involves 19,000 1989 Chevrolet Corsica sedans with optional styled steel wheels. Cracks may develop at the outer edges of the wheel spokes, which could lead to the spokes separating from the wheel rim. That could adversely affect steering and braking control.

Honda to fix bad oil switch

TORRANCE, Calif. — American Honda Motor Co. Inc. will repair about 31,000 imported cars in the United States and Canada for an oil-line problem.

The problem, caused by a defective oil-pressure switch, affects Japanese-made Honda Accords, Civics and Preludes and Acura Legends and Integras. All were produced last November and December.

The problem does not involve cars made at the company's U.S. or Canadian factories. Those cars use a U.S. supplier for the switch, while the imported cars use a Japanese supplier.

A spokesman for Honda North America Inc. said that about 27,000 of the defective cars reached the United States, but about 21,000 of those are still at dealerships or in inventory at American Honda Motor Co.

In all, approximately 70,000 impaired cars were produced, with about 7,800 of them reaching Europe, the spokesman said.

Rover ends 'exclusive' reign

LONDON — Rover Group said last week it will free its 850 dealers in the United Kingdom to sell competing brands on the same site, a move likely to be quickly followed by other major manufacturers.

Rover is Britain's third-largest vehicle maker after Ford and General Motors/Vauxhall.

The action comes as the government prepares to release a report based on Monopolies and Mergers Commission findings that British car prices are as much as 50 percent higher than comparably equipped cars sold on the Continent. The report cited the exclusive-franchise system as being a major cause of the disparity.

— Ed Wendt

UAW lets locals set vacations

DETROIT — The UAW will allow its locals at General Motors to decide individually if they want members to take vacations during a two-week companywide shutdown this summer, said Stephen Yokich, UAW vice president and head of the union's GM department. GM Chairman Robert Stempel in December asked workers to take vacations in the shutdown period that begins July 20 to help cut costs.

At a media briefing last week, Yokich said again that the UAW will not reopen its GM contract to further help the automaker reduce costs. He said GM could have saved billions of dollars if it had used certain provisions of the current contract. He said GM could have saved $1.3 billion alone in benefits to laid off workers if it had eliminated outsourcing and brought jobs back in-house.

— Liz Pinto

Amati names ad agency

IRVINE, Calif. — Amati, the luxury division of Mazda Motor of America Inc., has selected Lord, Dentsu & Partners, N.Y./L.A. to handle its estimated $60 million advertising account.

The agency will spend the next six months "getting to know who we are and what we are about," said Dick Colliver, Amati group vice president and general manager. "Then we're going to take them to Japan. I want them to see all the shrines. After all that, we'll show them the product."

Amati started the formal review last October and chose Lord, Dentsu from among five finalists.

Amati plans to begin selling cars in 1994 for the 1995 model year.

— Kristine Stiven Breese

briefly

Rolls breaks out the tissues

Before **Rolls-Royce** begins delivery of its new **Bentley** Continental R coupe to the United States next month, it must meet safety standards by having one of the $262,000 ultra plush vehicles pass standard crash tests. When the crash, which demolishes an automobile, occurs, "the caption will read: 'Have you ever seen a grown man cry,' " said Reg Abbiss, senior executive for corporate communications. Rolls-Royce will deliver 90 of the 1993 models to the United States, Abbiss said, and all have been sold.

FROM ROCKS TO STARS— Movie star Michael Douglas does voice-over duty in a new series of ads for **Infiniti**. Rumor has it that agency Hill, Holliday, Connors, Cosmopulos Inc. Advertising negotiated a $3 million, three-year contract with the actor. Research reportedly showed that Infiniti needed a voice that would cut through the clutter and speak directly to Infiniti's non-conformist, aging-boomer target buyers. The agency was reportedly turned down by its first choice, clutter cutter Jack Nicholson.

FAIRY TALE — Ford public relations exec Jerry Sloan has entered his second childhood. Sloan, executive director of civic and corporate affairs, will retire March 1 to start a new career as a full professor of public relations at Ohio University. He said in a press release that he and his wife, Jeanne, "are as happy as two little kids jumping in puddles on a rainy day." Sloan met his wife at Ohio U and never forgot his dream of being a professor there. "But Jeanne and I started having kids, and before we figured out it was because we were using the same toothbrush, we had four children, and I had a career at Ford," Sloan said. Now the happy couple have their wish and they hope everyone else will live as happily ever after.

NEW LOOK — In a move that might be likened to hanging a clove of garlic to ward off vampires, France's **Renault** Group last week unveiled a new logo to reflect what Chairman Raymond Levy calls a "firm determination not to let ourselves be overtaken by competitors." Because of Renault's "radical transformation" in recent years, the company's handout says, its image must now emphasize its "demanding quality standards . . .; Express the modern nature of the company . . . (and) Symbolize the vision of there being more to life with Renault." A heck of a burden to place on a lozenge.

Renault logo: new standards

PHYSICIAN, HEAL THYSELF — Even as Americans push Japanese automakers to buy more U.S. parts to close the trade deficit, **General Motors** is doing the opposite. Some 1990 and 1991 Geo Storms, built in Japan by **Isuzu,** were equipped with oxygen sensors made by GM's AC Rochester Division. Dealer service departments were told this month they are to use a replacement part from Nippondenso, a Japanese supplier, if it is necessary to replace the oxygen sensor. The bulletin said the Nippondenso part is more durable than AC Rochester's part.

Pensions of U.S. auto chiefs dwarf workers', Japanese

JOEL CHERNOFF
Crain News Service

Harold Poling, chairman and chief executive officer of Ford Motor Co., would receive nearly 54 times the pension of the average U.S. autoworker if he retired today.

In fact, Poling would receive nearly $1.1 million a year in retirement benefits — or almost 90 percent of his current cash compensation of $1.22 million. The average assembly line worker at Ford would get $20,400 a year in pension and Social Security benefits, or 53 percent of a $38,355 annual salary. Poling's 1990 compensation — excluding lucrative stock options — is 32 times the average pay for Ford hourly workers.

By comparison, a chief executive of a large Japanese company who chose a life annuity instead of the more common lump sum would get about $171,000 a year after taxes, or 36 percent of pay, while a Japanese worker would get 40 percent to 50 percent of his or her pay, based on gross income. (Although no specific information was available on pay and pensions at Japanese auto companies, the figures are similar for all large Japanese companies.)

Robert Stempel, General Motors' chairman and chief executive officer, also would fare well. If he retired today, his pension at age 65 would be 33 times that of the typical hourly worker. He would get $680,213 a year — or 78 percent of pay. (That calculation is based on Stempel's highest five-year average total compensation — virtually all earned before he became chairman. Presumably, his base earnings will increase substantially.)

But Lee Iacocca, chairman and chief executive officer of Chrysler Corp., likely will suffer a sizable drop in income when he retires. Iacocca, who plans to retire at the end of this year, is guaranteed $253,000 per year — or 28 percent of pay — for 10 years. Converted to a single-life annuity basis — it would be worth between $258,000 and $278,000 a year. That's 12.6 to 13.6 times the retirement pay for an auto assembly line worker.

Iacocca's pension, however, excludes an indeterminable amount of supplemental retirement benefits based on incentive compensation payments, as well as 50 percent of his Social Security benefit and his pension from Ford, where he worked before joining Chrysler in 1978.

GM chairman Robert Stempel would get $680,213 a year at age 65 if he retired today.

Ford chairman Harold Poling would receive almost $1.1 million a year in retirement benefits.

Chrysler chairman Lee Iacocca is guaranteed $253,000 a year for 10 years after he retires.

Gerald Williams, vice president and manager at the Tokyo office of TPF&C, an employee benefits consulting firm, calculated the Japanese executive's pension based on the assumption he retires at age 70 at a salary of 60 million yen ($476,000), after serving nine years as president plus six other years on the board. He would receive a lump-sum benefit of 277.5 million yen ($2.2 million). The figures exclude benefits prior to joining the company's board, which could be the first 30 years of service.

According to Charles D. Spencer & Associates Inc., a Chicago-based employee benefits consulting firm, the average Japanese worker retiring from a large firm would receive 4.2 million yen a year ($33,000) in pension and social security benefits, or 40 percent to 50 percent of pre-retirement salary before taxes plus bonus.

PENSIONS

U.S. workers benefit from well-run funds

continued from PAGE 1

in a broad spectrum of investment instruments — including domestic and foreign stocks and bonds, real estate, venture capital and private placements — restricted only by the "prudent man rule" of the Employee Retirement Income Security Act.

They generally have had a heavy commitment to equities. Each has more than 50 percent of the defined benefit assets invested in stocks, with Chrysler having a 60 percent equity commitment and Ford a 58 percent commitment.

LAWS HEM IN JAPANESE

The pension funds of the Japanese companies have operated under tighter investment restrictions, including a requirement that at least 50 percent of assets be invested in Japanese fixed-income securities, and no more than 30 percent be invested in equities.

The pension funds of three of Japan's biggest automakers — Toyota Motor Corp., Nissan Motor Co. Ltd. and Honda Motor Co. — have accumulated only $9.8 billion in assets backing the company pension benefits for 163,000 employees in Japan, according to the Japan Bond Research Institute. But these assets are at book value. The true value depends on what has happened to interest rates and stock prices since the investments were made.

Toyota contributed $161 million to its pension fund in 1990, or $38 per Japanese-produced vehicle. Nissan contributed $95.2 million, or $39 per vehicle. Honda contributed $123 million, or $87 per vehicle.

While the U.S. companies use a broad spectrum of investment management organizations applying a wide range of approaches to invest pension assets — including Japanese managers — the three biggest Japanese automakers use only domestic trust banks and insurance companies.

Until two years ago, all Japanese pension funds were allowed to use only trust banks and insurance companies, although since 1986 Ministry of Finance-approved non-Japanese trust banks could be used. The nine non-Japanese trust banks that have been allowed in the market have garnered less than 1 percent of corporate assets.

The U.S. auto companies have taken full advantage of the funding and investment rules of ERISA to secure the pension benefits of their employees.

They funded aggressively in the years when the companies had strong earnings, and they used the latitude of the "prudent man rule" and the guidance of capital markets theory to seek above-average investment returns in undervalued markets and market segments. The federal "prudent man rule" says that a U.S. pension fund can invest in any any investment that a prudent man, acting with some knowledge of investments, would make.

At the same time, as required by ERISA, they diversified their investments to reduce risk.

GM, for example, diversified from just stocks, bonds and cash equivalents into real estate and non-U.S. equities beginning in 1982. GM was ahead of most pension funds in both areas, and was early enough to have good long-term results in the two asset classes. (See related story on Page 17.)

The fund later added investments in foreign securities, and has used futures not only to hedge portfolios but also to facilitate moves into or out of market segments in a timely fashion.

Domestically, GM built a fund management staff of 60, including 40 professionals, more than 20 of whom are investment professionals. GM also hired a stable of 69 investment management firms that includes leading U.S. firms. The GM staff also manages assets internally.

The objective at General Motors Investment Management Co., the GM subsidiary that oversees GM pension fund investments, is to maximize the investment return on a risk-adjusted basis over time, according to W. Gordon Binns Jr., president of the subsidiary. "That serves the interest of the beneficiaries (by securing their pensions) and the company," he said.

PENSION FUND CONTRIBUTIONS

Amounts U.S. Big 3 and Japan's top three automakers contributed to their pension funds in 1990

	Total contribution (in millions)	Cost per vehicle
General Motors*	$ 0	$ 0
Ford Motor Co.*	0	0
Chrysler Corp.	784	585
Toyota Motor Corp.	161	38
Nissan Motor Co. Ltd.	95	39
Honda Motor Co. Ltd.	123	87

*Income from investments covered GM's and Ford's pension liabilities for the year.

Ford likewise has adopted a diversified investment management approach. As of Sept. 30, it had 58 percent of its assets in stocks, 29 percent in fixed-income investments, 8 percent in cash and 5 percent in real estate. It also invests in oil and gas, venture capital, and private placements, and it uses derivatives. Ford has built a diversified stable of 30 investment management organizations.

Chrysler Corp. contributed $784 million to its pension fund in 1990. Although not as well funded as GM and Ford, Chrysler has diversified across asset classes, using international securities and real estate besides U.S. stocks and bonds. It employs 42 managers with a wide variety of styles and specializations.

MANAGERS ARE ADMIRED

The investment management teams of the three U.S. auto companies are highly regarded in investment management circles.

Thomas Larkin, president and chief operating officer of Trust Co. of the West, in Los Angeles, which manages more than $15 billion for U.S. pension funds including each of the Big 3, said: "They've got great professional staffs at all three of those companies. (They're) extraordinarily professional. By and large, they are on the cutting edge — leaders as opposed to followers."

As an example, Larkin said, they have developed normal portfolios (portfolios representative of the kinds of securities that fit within each manager's style) with which to measure the performance of the managers, rather than simply using the Standard & Poor's 500 Stock Index.

John W. Rogers Jr., chief investment officer of Ariel Capital Management Inc. in Chicago, a manager for Ford and Chrysler, said the two companies "showed great courage" in hiring his relatively young firm.

"I was impressed with the professionalism of the people," he said. "You get a sense they are very tough and demanding, both in their written and oral reporting."

John R. Thomas, managing director at J.P. Morgan Investment Management Corp. in New York, said: "If you look at the leaders in the U.S. pension industry, I don't think you'd find anyone who would disagree that the U.S. auto companies are leaders in being sophisticated plan sponsors." Morgan manages assets for all three U.S. automakers.

While the automakers declined to disclose the investment performance of their pension funds, GM's Binns said the GM fund's total return had been in excess of 15 percent compounded annually for the 10 years ended Dec. 31. The median large corporate pension fund in the country returned about 15.3 percent in that period, according to SEI Corp., a Wayne, Pa.-based consulting firm.

The Japanese auto companies, meanwhile, have been hampered by the relative youth of the Japanese pension industry, legal restrictions and even cultural differences.

Only since early 1990 have the Japanese pension funds been able to hire non-bank or insurance company managers. In addition, they are limited in their investments. At least 50 percent of the assets must be in assets with guaranteed principal, such as government bonds. No more than 30 percent of the assets may be invested in stocks, and no more than 20 percent in real estate. And no more than 30 percent of the assets may be invested in foreign currency denominated assets.

VISIONS OF THE PAST

Ironically, the investment management structures at Toyota, Nissan and Honda look remarkably like the structure General Motors abandoned in 1982.

Until that time, GM's pension assets had been managed solely by bank trust departments and insurance companies that had total control over the asset allocation decision. Alternative investments were not used.

Noriyuki Morimoto, an employee benefits consultant with The Wyatt Co. in Tokyo, noted the differences between U.S. and Japanese pension management practices: "In Japan, pension investments are not very important issues for the management of companies, whereas in the U.S., pension investing is one of the most important management issues for companies overall.

"It's not so important in Japan because the amount of pension assets is smaller than in the U.S. It's one-tenth the size, although assets are growing rapidly and becoming a more important management issue. . . . There has been little importance placed, until recently, on performance. But that's changing rapidly because of deregulation and the ability to now hire investment advisers other than trust banks and insurance companies for managing new cash (contributions) into pension funds."

For fiscal 1990, the book value performance — not counting any appreciation of market value of

see PENSIONS, 17

How series was written

This series on automakers' pension funds was prepared by the staff of *Pensions & Investments*, a sister publication of *Automotive News*. The biweekly newspaper is a leading trade journal of corporate and institutional investing.

GM blazes fund management trail

MICHAEL J. CLOWES
and JOEL CHERNOFF
Crain News Service

The $40 billion General Motors Corp. pension fund pays benefits of $250 million each month to more than 300,000 retirees and still has investment returns sufficient to make company contributions unnecessary.

On the other hand, the $5.8 billion Chrysler Corp. pension fund has had to use many of the same investment techniques and some different ones to try to help the company through its financial difficulties and to reduce its unfunded liability.

In GM's case, above-average investment performance by the GM pension management group — now known as General Motors Investment Management Co. — along with extraordinary returns from the capital markets in the past 10 years, eliminated the need for contributions.

> "Our intent is to stay on the leading edge of investment thinking and technology."
>
> **W. GORDON BINNS JR.**
> GM INVESTMENT MANAGEMENT CO.

While W. Gordon Binns Jr., president of the GM investment subsidiary, declined to release specific figures, he said the fund's performance was better than the median return of 15 percent, compounded annually for the 10 years ended Dec. 31, achieved by a group of large corporate pension funds to which the GM fund belongs.

The GM pension fund is in the top 20 percent of U.S. pension funds in the sophistication of its investment activities and the quality of the investment management team, said George Russell, chairman of the Frank Russell Co. in Tacoma, Wash.

The GM fund, under Binns, has become a sophisticated user of most of the investments available to large pension funds today, employing 69 investment management firms and running some assets internally. There are more than 20 professionals on the investment staff.

It also was among the first funds to make a substantial commitment to international investing, and invests not only in foreign stocks but also in foreign bonds. It was among the first to become active in the emerging markets such as Mexico, Brazil and India.

The fund also was an early investor in venture capital and real estate and a pioneer in investing in privately offered securities, an area some consultants believe will become more important to large funds.

In addition, the fund was an early user of derivative instruments, such as futures, not only to control risk but also to change exposures quickly when it sees the need. "This was particularly useful when we were getting contributions," Binns said. "In 1984 and 1985 the company made extra contributions, and the derivatives were useful then in putting those contributions to work."

GM's investment company has continued to study and use the latest derivatives and has a unit dedicated to keeping up with the latest capital market research, investment ideas and investment products.

"We think we have developed

see STRATEGY, 18

PENSIONS

Japanese spending expected to grow

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assets — for the Toyota pension fund was reported as 6.89 percent, down from 8.68 percent in 1988, according to the Japan Bond Research Institute's pensions and investments research department.

For Honda, the 1990 book value performance was reported as 8.69 percent, down from 8.17 percent in 1988.

The 1990 figure for Nissan was not available, but in 1989 it reported a book value return of 7.76 percent, down from 8.44 percent in 1988.

The book value performance is the investment yield (interest plus dividends) as a percentage of the book value of the assets. It does not include market gains or losses on the value of the securities.

Ernest Bianco, president of Frank Russell Japan Co. Ltd. in Tokyo, said all pension plans in Japan are defined benefit plans — plans, entirely paid by the company, which promise a specific retirement benefit.

Unlike in the United States, a lot of pension obligations are carried on the books of the company as a liability with no segregated assets to back them. But a growing amount of pension obligations are being funded, he said.

A U.S. money manager said he expects Japanese corporations to post annual funding increases of 15 percent to 20 percent for the next two decades as they cover unfunded liabilities that have grown up in the years since Japanese companies began their pension plans in the 1960s.

Also in Japan, if a pension fund accumulates assets in excess of liabilities, the surplus assets cannot revert back to the sponsor, Bianco said. The assets can be used only to provide ancillary benefits to retirees, such as retirement housing or recreational facilities.

"Funding of pensions is occurring at an (insufficient) level, given the constraints on how the assets can be managed. Investment returns are less than one should expect in a more efficient investment program," Bianco said.

Although the companies are not accounting for assets at current market value, "they're paying liabilities in current yen. . . . So there is a huge mismatch in the assets vs. the liabilities," he said.

JOE WILSSENS/AUTOMOTIVE NEWS

Chrysler worker Jeff Olsen uses a 'toy tab' at the Sterling Heights, Mich., assembly plant. Because of the company's one-to-one ratio of employees to retirees, pension costs added $585 to every Chrysler vehicle built in 1990.

"So it's not clear if assets and liabilities are valued similarly. Some pundits think that the Achilles' heel of Japan is the improper funding of Japan's pension liabilities."

> "Some pundits think that the Achilles' heel of Japan is the improper funding of Japan's pension liabilities."
>
> **ERNEST BIANCO**
> FRANK RUSSELL JAPAN CO. LTD.

CHANGES TAKING PLACE

Now, however, "Japan is starting to own up to some responsibilities," Bianco said. A yearlong study group, commissioned by the Ministry of Finance and the Ministry of Health and Welfare, and consisting of key pension industry players, will report at the end of March.

The group is addressing such things as performance measurement and the question of pension valuation, he said.

He also noted that despite the easing of restrictions, it's still difficult for Japanese pension funds to hire organizations other than trust banks and insurance companies. And "only the new cash of employee pension funds can be managed by discretionary investment advisers; existing monies must still be managed by trust banks and insurers," he said.

Wallace Wormley, deputy president and chief investment officer of Prudential Investment Advisory Co. Ltd. in Newark, N.J., said changes will be made to ease the requirements enabling investment advisers to manage Japanese pension assets. The minimum size that the investment manager must have under management to be qualified to manage pension assets will be dropped to 500 million yen from 1 billion yen, and the managers will have to keep only 30 percent of assets in Japanese government bonds.

And Japanese pension funds have made some moves to hire foreign managers.

Duncan Fordyce, director of the Tokyo office of InterSec Research Corp., noted that the Japan Public School Employee's fund has hired about seven non-Japanese money managers. In addition, Western Japan Plastic hired at least one, and the Pension Fund Association hired several.

Fordyce noted that the book value accounting method preferred in Japan leads to a different method of asset management than in the United States.

If a manager can't sell a security at a loss because he would be penalized by the accounting system, he'll hang onto this security until he has a gain in another security that would offset the loss, Fordyce said.

Therefore, he'll "hang onto the dogs and skim the winners to realize gains to offset losses."

In addition, Fordyce said, in the last couple of years, the restrictions on diversification have cost Japanese funds enormously because of the Japanese securities market's poor performance.

On the other hand, the Japanese companies are funding their pension liabilities aggressively.

Said Fordyce: "We don't have to have an ERISA law passed in Japan to have adequate funding today in anticipation of the needs in 25 to 30 years; it's taking place."

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Wary analysts expect sales to increase in '92

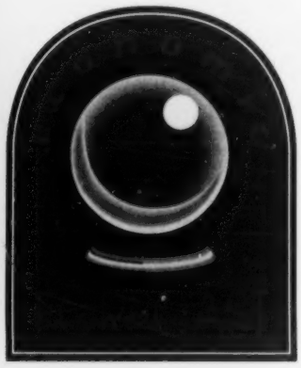
13-14 million seen, a gain of 4-12%

CHARLES M. THOMAS
Staff Reporter

Auto analysts are more cautious in their sales forecasts this year than last, with predictions wedged comfortably between 13 million and 14 million cars and trucks.

That is 4-12 percent more than 1991's dismal sales of 12.5 million vehicles, including medium- and heavy-duty trucks.

The range of new-car sales predicted by analysts for 1992 is 8.7 million to 9.2 million with imports making up 1.9 million to 2.4 million.



Forecasts for import trucks are 300,000 to 600,000 units.

A majority of the 10 analysts polled by *Automotive News* say General Motors will have the greatest gain in new-car market share among the Big 3 and that Ford Motor Co. will lose share.

Jean Claude Gruet, analyst with New York-based UBS Securities, says Chrysler will show the highest volume increase from a percentage standpoint, but GM will have the biggest gain in market share.

But there are other opinions.

"Chrysler will have the largest domestic truck sales increase," said Ron Glantz, analyst with Dean Witter Reynolds in San Francisco.

"GM will have the largest increase in car sales," he said. "Overall, Ford will show the largest decline and Chrysler the largest gain."

Maryann Keller's forecast also ran contrary to those of other analysts.

Keller, managing director of Furman Selz Inc. in New York, predicted Ford will have the greatest gain in market share. GM, however, will end the year a loser.

But, Keller said, market share gains and losses in 1992 will be almost negligible.

The consensus among analysts is that Toyota (including Lexus) will have the biggest market share gain among the imports while shares for Volvo, Volkswagen, Nissan and Hyundai will suffer.

Jack Kirnan, of New York-based Kidder Peabody was the most noteworthy dissident saying Toyota could be hurt by "buy-American" trends.

"I see national politics on the side of the domestic automakers," he said. "Buy-American is creeping into the American consciousness."

Glantz predicts that Mazda will have the largest market share gain among the imports, followed by Mitsubishi, and Hyundai will have the largest decline.

Average unemployment will remain stubbornly high for an election year, according to analysts. Forecasts ranged from 6.5 percent to 7.2 percent.

The range for economic growth as measured by gross domestic product (GDP) was 1.0 percent to 2.7 percent for the 10 analysts polled.

And the consensus is that long- and short-term interest rates will rise after the second quarter of the year if there is an economic recovery.

Segments of the economy expected to grow include health care, housing, autos and exports.

Analysts expect a slight decline, ranging from 1.5 percent to 3 percent, in auto sales in Europe in 1992.

ANALYSTS' FORECASTS FOR THE 1992 CALENDAR YEAR
(figures in millions of units)

	Total vehicles	Cars	Trucks*	Imported cars	Imported trucks
Edward Sullivan *The WEFA Group*	13.0	8.7	4.3	2.1	550,000
Jean Claude Gruet *UBS Securities*	13.5	8.8	4.7	2.2	550,000
John Hammond *J.D. Power*	13.5	8.8	4.7	2.2	500,000
Maryann Keller *Furman Selz Inc.*	13.3	8.8	4.5	1.9	600,000
Jack Kirnan *Kidder Peabody*	13.5	9.0	4.5	2.2	300,000
Steve Girsky *Paine Webber*	13.4	8.8	4.6	2.1	500,000
Michael Luckey *Luckey Consulting Group*	14.0	9.2	4.8	2.2	500,000
William Pochiluk** *Autofacts Inc.*	13.2	8.8	4.4	2.4	575,000
Ron Glantz *Dean Witter Reynolds*	13.4	8.7	4.7	2.0	500,000
Scott Merlis *Morgan Stanley*	13.5	9.1	4.4	2.2	550,000

*Includes medium- and heavy-duty trucks
**Does not include medium- and heavy-duty trucks

Hilty: Mood must change for economy to improve

MARY CONNELLY
Staff Reporter

HIGHLAND PARK, Mich. — Chrysler Corp. predicts that 1992 will bring the slowest economic recovery in postwar history.

Reaching even recession-level sales of 13.5 million units in the United States in 1992 will require an economic stimulus from Washington, says Chrysler chief economist Donald Hilty. Hilty predicts that the economy will not rebound until autumn.

While the statistics argue for an upturn in U.S. vehicle sales, the national mood does not.

Hilty says there is already greater pent-up demand for vehicles than in the recessions of 1960-61, 1969-70 and 1973-75. And auto installment debt has dropped $20 billion since January 1990.

But people are simply not in the mood to buy, and that is the biggest obstacle to an economic upswing, Hilty says.

"Consumer attitudes are about at the same level as in the worst of the 1982 recession," he says.

Hilty: People have to start buying at Sears, K mart.

Chrysler's answer, which it is beginning to peddle in Washington, is an immediate cut in the basic Social Security tax rate paid by both employees and employers.

"We have to see some stimulus out of Washington to get consumer attitudes turned around," Hilty says.

"The stimulus package doesn't have to give people the wherewithal to buy a car. We just would like people to start buying at K mart or Sears. Once their suppliers start coming back to work, people who have jobs will see their neighbors come back to work, and they will start buying vehicles."

Chrysler proposes temporarily cutting the basic Social Security tax rate from 6.2 percent to 4.2 percent paid on $55,000 in wages. The money diverted from the Social Security fund would be repaid with a surcharge when the employment rate improves, Chrysler suggests.

Such a move could pump up to $100 billion into the economy, Hilty says. A household earning $50,000 annually would have an immediate increase of about $80 a month in take-home pay — enough to spark some spending, he says.

"Once you start spending $80 more a month at K mart, it multiplies throughout the economy very fast because K mart buys more supplies and people get back to work fast. It takes effect immediately, and it especially helps the middle class," Hilty says.

"Reducing the rate for the employer is also key because small businesses especially generate a lot of jobs, and if their costs are reduced they would be more inclined to hire faster."

Chrysler expects Washington to stimulate the economy in some fashion in 1992 because President Bush faces re-election in November. Hilty thinks the recent drop in interest rates came too late

see HILTY, 22

Eads fears tax-cut talk, favors interest cut

PHIL FRAME
Staff Reporter

General Motors' economics guru would gladly trade a fiscal stimulus from the federal government for another half-point reduction in interest rates.

George Eads, GM's chief economist, may get both, though, and he's a little worried about that.

"The talk about tax cuts could actually hurt the industry . . . by causing people to hold off a little bit to see what Congress does," Eads says. "If I could trade another half a point of interest rate easing for a pledge to do nothing bad on taxes — not raise taxes on the rich and not fiddle around with a bunch of other stuff — I'd trade that right now."

Eads thinks President Bush will seek some financial stimulus this week when he announces his economic strategies during his State of the Union speech.

"I was one of the eight economists that visited him prior to Thanksgiving," Eads said. "At that point, the principal message we had was interest rates should come down dramatically — and have — and that a little bit of fiscal stimulus wouldn't hurt, provided it could be contained."

That's why Eads thinks Bush will probably seek a cut in the capital gains tax and perhaps some form of investment tax credit.

"But I am concerned about what economists call 'announcement effects' — people being worried about tax changes and holding off purchases until they see what happens," Eads says.

People are worried enough, he says. Continuing consumer concern over the state of the U.S. economy and lack of confidence about their personal financial situation have led Eads to reduce his forecast for sales of cars and light trucks in the United States this year.

He now figures the market is good for 13 million to 13.5 million vehicle sales during 1992. That's down from GM's forecast of 13.5 million to 14 million last October.

"The big thing that's happened (since October) was plunging consumer confidence," Eads says.

> "I am concerned about 'announcement effects' — people being worried about tax changes and holding off purchases until they see what happens."
>
> **GEORGE EADS**
> GM CHIEF ECONOMIST

With the country coming out of a recession during which income growth was poor and personal savings remained low, consumers were not able to pay off debts and didn't have much money to buy big-ticket items, Eads says.

"Consumer confidence makes a big difference" in a situation like that, he says. "So we've been watching that probably as much as anything else" as an indicator of the economy's health.

Eads says there was some stability in consumer sentiment in a report that came out in early December, but those figures were issued before GM's big Dec. 18 announcement that it would close 21 plants and trim nearly 80,000 jobs from its U.S. and Canadian payrolls during the next three years. The consumer sentiment numbers also were issued before the Federal Reserve cut one percentage point off the rate it charges banks to borrow money.

"We're going to be waiting very anxiously to see which of those two things affected consumer sentiment most," Eads says. "So if we were to see in January a resumed decline in consumer sentiment, our forecast for vehicle sales would end up being at the bottom end of that (13 million to 13.5 million) range, maybe even lower. If we see the sentiment stabilized, or maybe even begin to improve, you might see us going to the middle or upper end of that 13 million to 13.5 million.

"I think what caused (consumer confidence) to plunge was a realization that jobs were not being created," Eads says. "I think people turned their focus from the overseas situation to the domestic economy and took a look at their own incomes. They saw, for example, that in the last year, federal, state and local governments together have increased taxes by about $50 billion, or 1 percent of gross domestic product."

Eads: President probably will seek capital gains tax cut.

Eads says it's the first time there have been significant tax increases during a recession since the Great Depression. People saw that their wages and hours worked were not growing. They saw some decline in the interest rates they were paying, but they saw an even more rapid decline in the interest income they were receiving.

"So, they said, 'My situation's getting worse.' And consumer confidence plunged," Eads says.

Job creation is a powerful factor in consumer sentiment and is another important indicator Eads is watching. Job creation appears to be what makes this recovery different from those in the past, he says.

"By this time, you should have seen about a million jobs created from the end of the recession," Eads said. "Look back at all the recent recessions, by this point, six months out, employment would be up three-quarters of a million to a million. Thus far, in this one, we're down a little bit from the trough."

The longer the economy remains in that condition, the more consumers will use the money

see EADS, 22

The Honda Civic VX hatchback's 11.9-gallon fuel tank and 55-mpg highway mileage carry it 654.5 miles per tank of gas — making it the top choice for long-distance cruising.

Long-Distance Runners

Big fuel tanks, high mpg let drivers take the long way home these days

By: Al Fleming

Chuck and Denise Peters are big-car crazy and football nuts.

One early Sunday morning in December, the Northern Ohio couple hopped into their Chevrolet Caprice sedan and drove 250 miles nonstop to Buffalo, N.Y., to watch the Detroit Lions play the Buffalo Bills.

After the game, they soared straight home, completing the 500-mile round trip without once stopping for gasoline.

The Peters' trip underscores three facts. They'll drive anywhere to see a pro football game. They don't like stopping to fuel their Caprice. And most 1992 model cars haul their owners more miles per tankful than comparable automobiles of recent years.

Those long-distance models even include 1992 muscle cars like the Chevrolet Corvette, worthy of the horsepower-happy 1960s, but with superior fuel efficiencies which can deliver 400 to 500 miles and more between freeway fueling stops.

An *Automotive News Insight* compilation of 200 domestic and import models shows the average 1992 car journeys 464 miles on a tankful of gasoline.

Precisely on that mark are the Ford Taurus/Mercury Sable and Mercedes-Benz 300E.

For the study, cruising ranges were derived by multiplying the car's fuel tank capacity by its EPA-estimated highway miles per gallon. For the purpose of comparison, only the most fuel efficient model of each car line was calculated; in most cases that was the base model with standard powertrain.

The study shows 49 1992 models can obtain at least 500 mpg.

The long-distance champ is the Honda Civic VX hatchback, whose 11.9-gallon fuel tank and 55-mpg highway mileage carry it 654.5 miles, good for a non-stop trip from New York to Detroit with a few drops of gas to spare.

Two others top the 600-mile mark:

- Cadillac Brougham, 625 miles per tankful
- Geo Metro XFL, 614.8 mpt.

As a category, large station wagons (Buick Roadmaster, Chevrolet Caprice, Oldsmobile Custom Cruiser), by virtue of their ample fuel tanks (22 gallons) and 25-mpg highway mileage, lead all car sizes in distance capability at 550 miles.

Next at 490 miles are large cars, led by the Cadillac Brougham, whose 25 gallon tank and 25 mpg rating carry it those astounding 625 miles.

Compact cars on average can drive nonstop 481 miles, with Volkswagen Jetta (14.5 gallon tank and 40 mpg) tops at 580 miles.

Then come mid-sized models at 476 miles, topped by the Volvo 960 (21.8 gallon tank and 26 mpg) at 566.8 miles.

Small station wagons came in at 462 miles, led by the Toyota Camry (18.5 gallon tank and 27 mpg).

Subcompacts averaged 450 miles, headed by the industry champ Honda Civic VX hatchback (11.9 gallon tank and 55 mpg), the top-distance performer of all at 654.5 miles.

Mid-sized station wagons averaged 439 miles, paced by the Volkswagen Passat (18.5 gallon tank and 30 mpg) at 555 miles.

The shortest-distance classes, mini-compacts at 438 miles and two-seaters at 430 miles, are paced by Porsche 911 Carrera 2/4's 507.5 miles.

The shortest-trippers of all are:

- Ferrari Mondial t cabriolet, 314.5 miles
- Lotus Elan, 316.2 miles
- Subaru Justy, 340.4 miles.

In the case of the Elan and Justy, their abbreviated range results from small fuel tanks, not low mpg.

The Justy's 9.2 gallon tank is the tiniest of all cars surveyed. The Elan's is 10.2 gallons.

Besides ample fuel tanks, many large and mid-sized cars with long cruising distances have torque-converter lockup mechanisms on their automatic transmissions, which improve fuel economy by eliminating fluid energy losses associated with transmitted power from the engine to the transmission through the torque converter.

Here are some other highs and lows:

- Biggest fuel tanks: Aston Martin Virage, 30.2 gallons; Rolls-Royce and Bentley, 28.5; Ferrari F40 and Lamborghini DB132/Diablo, 26.4.
- Smallest fuel tanks: Subaru Justy, 9.2 gallons; Ford Festiva, 10.0; Lotus Elan, 10.2; Geo Metro LSi convertible, Metro XFL, Suzuki Swift and Daihatsu Charade, 10.6.
- Best highway mileage: Geo Metro XFL, 58 mpg; Honda Civic VX hatchback, 55 mpg; Suzuki Swift, 50 mpg.
- Worst highway mileage: Bentley, Rolls-Royce and Lamborghini, 14 mpg.

As for the football frantic Peters, they buy big cars with big fuel tanks because they love long-haul driving without gas station interruptions. What does the future hold for car owners like them in the near future as tougher pollution laws, new power sources and alternative fuels become part of the motoring scene?

First, let's take a look back. In the fuel crisis, pump-price hiking days of the 1970s, there were traumatic experiences for owners of cars with little fuel tanks and hungry fuel appetites. Many a Corvette and Mustang owner was stranded on a Sunday when gas stations were closed and the sporty cars couldn't get them home.

Auxiliary gas tanks became required equipment.

There are additional factors these days. Clamor by some in Congress for a 40-mpg CAFE by 2001, along with tougher air pollution regulations, is turning the spotlight on alternatives to gasoline such as methanol, natural gas and electricity.

These alternatives don't offer anywhere near the range of gasoline-powered vehicles. There is little, if any, talk about coming close to the 400 to 600 miles miles per tankful of fuel that many 1992 cars attain.

By the way, the Peters drove to the Super Bowl game over the weekend. But the 700-mile trip from Ohio to Minneapolis was beyond the nonstop capability of their Caprice — and probably their kidneys. They made a pit stop each way.

But wait until next year. A new crop of 1993 model cars. A few more miles per gallon. A bit bigger gas tank. Who knows? Maybe 700 miles won't be all that far out of reach for the long-cruising couple. □

Al Fleming is industry editor for Automotive News; statistics were compiled by Colleen Belli, a free-lancer based in Mt. Clemens, Mich.

MILES PER TANKFUL

Lowest ranges fall below 400 miles

1.	Ferrari Mondial t Cabriolet	314.5
2.	Lotus Elan	316.2
3.	Subaru Justy	340.4
4.	Mercury Capri	344.1
5.	Volvo 940 wagon	347.6
6.	Mazda MX-5 Miata	357.0
7.	Alfa Romeo Spider	366.0
8.	Jaguar XJ-S convertible	367.2
9.	Lamborghini Diablo	369.6
10.	BMW 318i convertible	377.0
11.	Chrysler LeBaron	378.0
12.	Mercedes-Benz 500SL	379.8
13.	Isuzu Impulse	384.4
14.	Chrysler LeBaron convertible	392.0
15.	BMW 325i convertible	393.6

Highest ranges surpass 500 miles

1.	Honda Civic VX hatchback	654.5
2.	Cadillac Brougham	625.0
3.	Geo Metro XFI	614.8
4.	Chevrolet Caprice	598.0
5.	Volkswagen Jetta	580.0
6.	Buick Roadmaster	575.0
7.	Mercedes-Benz 300D Turbo	573.5
8.	Volvo 960	566.8
9.	Volkswagen Passat	555.0
10.	Volkswagen Passat wagon	555.0
11.	Buick Roadmaster wagon	550.0
12.	Chevrolet Caprice wagon	550.0
13.	Oldsmobile Custom Cruiser wagon	550.0
14.	Audi 100	548.6
15.	Chevrolet Cavalier	547.2

DRIVING DISTANCE WITH A TANK OF FUEL

FOR CARS SOLD IN THE UNITED STATES

Models	Fuel tank (gallons)	EPA highway est. mpg	Base engine/ trans.	Miles per tankful
Two seaters				
Porsche 911 Carrera 4/2	20.3	25	3.6/M5	507.5
Chevrolet Corvette	20.0	25	5.7/M6	500.0
Lotus Espirit Turbo	18.5	27	2.2/M5	499.5
Geo Metro LSi convertible	10.6	46	1.0/M5	487.6
Mercedes-Benz 300SL	21.1	23	3.0/M5	485.3
Cadillac Allante	22.0	22	4.5/L4	484.0
Mazda RX-7	18.5	25	1.3/M5	462.5
Nissan 300ZX	19.0	24	3.0/M5	456.0
Ferrari F40	26.4	17	2.9/M5	448.8
Acura NSX	18.5	24	3.0/M5	444.0
Ferrari Testarossa	26.5	16	4.9/M5	424.0
Ferrari 348 TB/TS	23.2	18	3.4/M5	417.6
Toyota MR2	14.3	29	2.2/L4	414.7
Mercedes-Benz 500SL	21.1	18	5.0/A4	379.8
Lamborghini DB132/Diablo	26.4	14	5.7/M5	369.6
Jaguar XJS convertible	21.6	17	5.3/A3	367.2
Alfa Romeo Spider	12.2	30	2.0/M5	366.0
Mazda MX-5 Miata	11.9	30	1.6/M5	357.0
Lotus Elan	10.2	31	1.6/M5	316.2
Minicompact cars				
Nissan NX	13.2	38	1.6/M5	501.6
Toyota Celica convertible	15.9	28	2.2/M5	445.2
Volkswagen Cabriolet	13.8	32	1.8/M5	441.6
Nissan 240SX	15.9	27	2.4/M5	429.3
Toyota Paseo	11.9	34	1.5/M5	404.6
Mercury Capri	11.1	31	1.6/M5	344.1
Subcompact cars				
Honda Civic VX hatchback	11.9	55	1.5/M5	654.5
Geo Metro XF1	10.6	58	1.0/M5	614.8
Chevrolet Cavalier	15.2	36	2.2/M5	547.2
Pontiac Sunbird	15.2	35	2.0/M5	532.0
Suzuki Swift	10.6	50	1.0/M5	530.0
Nissan Sentra	13.2	39	1.6/M5	514.8
Aston Martin Virage	30.2	17	5.3/M5	513.4
Mitsubishi Eclipse	15.9	32	1.8/M5	508.8
Plymouth Laser	15.9	32	1.8/M5	508.8
Toyota Celica	15.9	32	1.6/M5	508.8
Mitsubishi 3000GT	20.0	24	3.0/M5	480.0
Dodge Colt	13.2	36	1.5/M4	475.2
Dodge Stealth	19.8	24	3.0/M5	475.2
Eagle Summit	13.2	36	1.5/M4	475.2
Mitsubishi Mirage	13.2	36	1.5/M4	475.2
Plymouth Colt	13.2	36	1.5/M4	475.2
Saab 900 convertible	18.0	26	2.0/M5	468.0
Subaru SVX	18.5	25	3.3/L4	462.5
Ford Mustang	15.4	30	2.3/M5	462.0
Mazda MX-3	13.2	35	1.6/M5	462.0
Eagle Talon	15.8	29	2.0/M5	458.2
Nissan 300ZX 2 + 2	19.0	24	3.0/M5	456.0
Lexus SC300	20.6	22	3.0/L4	453.2
BMW 850i	23.8	19	5.0/M6	452.2
BMW 325i	17.2	26	2.5/M5	447.2
Geo Storm	12.4	36	1.6/M5	446.4
Daihatsu Charade	10.6	42	1.0/M5	445.2
Toyota Tercel	11.9	37	1.5/M4	440.3
Geo Prizm	13.2	33	1.6/M5	435.6
Toyota Corolla	13.2	33	1.6/M5	435.6
Dodge Daytona	14.0	31	2.5/M5	434.0
Dodge Shadow convertible	14.0	31	2.5/M5	434.0
Jaguar XJS coupe	24.0	18	5.3/A3	432.0
Infiniti M30	17.2	25	3.0/L4	430.0
Hyundai Excel	11.9	36	1.5/M4	428.4
Toyota Supra	18.5	23	3.0/M5	425.5
Saturn SC	12.8	33	1.9/M5	422.0
Chevrolet Camaro	15.5	27	3.1/L4	418.5
Pontiac Firebird Trans Am	15.5	27	3.1/L4	418.5
Audi 80	15.9	26	2.3/M5	413.4
Ford Festiva	10.0	41	1.3/M5	410.0
Volkswagen Fox	12.4	33	1.8/M5	409.2
Mercedes-Benz 190E	14.5	28	2.3/M5	406.0
Volkswagen Corrado	14.5	28	1.8/M5	406.0
Hyundai Scoupe	11.9	34	1.5/M5	404.6
Bentley Continental	28.5	14	6.8/L4	399.0
Rolls-Royce Corniche IV	28.5	14	6.8/L4	399.0
BMW 325i convertible	16.4	24	2.5/M5	393.6
Chrysler LeBaron convertible	14.0	28	2.5/L3	392.0
Isuzu Impulse	12.4	31	1.8/M5	384.4
BMW 318i convertible	14.5	26	1.8/M5	377.0
Subaru Justy	9.2	37	1.2/M5	340.4
Ferrari Mondial t cabriolet	18.5	17	3.4/M5	314.5
Compact cars				
Volkswagen Jetta	14.5	40	1.6/M5	580.0
Mercedes-Benz 300D Turbo	18.5	31	2.5/A4	573.5
Pontiac LeMans	13.2	41	1.6/M5	541.2
Toyota Camry	18.5	29	2.2/M5	536.5
Chevrolet Beretta	15.6	34	2.2/M5	530.4
Chevrolet Corsica	15.6	34	2.2/M5	530.4
BMW 525i	21.1	25	2.5/M5	527.5
Ford Tempo	15.9	33	2.3/M5	524.7
Mercury Topaz	15.9	33	2.3/M5	524.7
Mazda Protege	14.5	36	1.8/M5	522.0
Jaguar XJ6	23.2	22	4.0/L4	510.4
Honda Accord	17.0	30	2.2/M5	510.0
Infiniti G20	15.9	32	2.0/M5	508.8
Subaru Loyale	15.9	32	1.8/M5	508.8
Saab 90	18.0	28	2.0/M5	504.0
Mazda 323	13.2	37	1.6/M5	488.4
Saturn SL	12.8	38	1.9/M5	486.4
BMW M5	21.1	23	3.5/M5	485.3
BMW 535i	21.1	23	3.4/M5	485.3
Lexus ES300	18.5	26	3.0/M5	481.0
Mitsubishi Galant	15.9	30	2.0/M5	477.0
Subaru Legacy	15.9	30	2.2/M5	477.0
Ford Escort	11.9	40	1.9//M5	476.0
Nissan Stanza	16.4	29	2.4/M5	475.6
Mitsubishi Diamante	19.0	25	3.0/L4	475.0
Ford Probe	15.1	31	2.2/M5	468.1
Acura Legend	18.0	26	3.2/M5	468.0
Alfa Romeo 164	17.2	27	3.0/M5	464.4
Volkswagen Golf GTi	14.5	32	1.8/M5	464.0
Mercedes-Benz 300E	18.5	25	2.6/A4	462.5
Isuzu Stylus	12.4	37	1.6/M5	458.8
Dodge Shadow	14.0	32	2.2/M5	448.0
Plymouth Sundance	14.0	32	2.2/M5	448.0
Acura Vigor	17.2	26	2.5/M5	447.2
Toyota Cressida	18.5	24	3.0/L4	444.0
Volvo 240	15.8	28	2.3/M5	442.4
Buick Skylark	15.2	29	3.3/L3	440.8
Oldsmobile Achieva	15.2	29	2.3/L3	440.8
Pontiac Grand Am	15.2	29	2.3/L3	440.8
Mercury Tracer	11.9	37	1.9/M5	440.3
Mitsubishi Precis	11.9	36	1.5/M5	428.4
Hyundai Elantra	13.7	29	1.6/M5	397.3
Chrysler LeBaron	14.0	27	2.5/L3	378.0
Mid-sized cars				
Volvo 960	21.8	26	2.9/L4	566.8
Volkswagen Passat	18.5	30	2.0/M5	555.0
Audi 100	21.1	26	2.8/M5	548.6
Lexus LS400	22.5	23	4.0/L4	517.5
Buick Riviera	18.8	27	3.8/L4	507.6
Oldsmobile Toronado	18.8	27	3.8/L4	507.6
BMW 735iL	24.0	21	3.4/L4	504.0
Lincoln Mark VII	21.0	24	5.0/L4	504.0
Dodge Spirit	16.0	31	2.5/M5	496.0
Plymouth Acclaim	16.0	31	2.5/M5	496.0
Chevrolet Lumina	17.1	29	3.1/L4	495.9
Infiniti Q45	22.5	22	4.5/L4	495.0
Mazda 626/MX-6	15.9	31	2.2/M5	492.9
Buick Century	15.7	31	2.5/L3	486.7
Oldsmobile Cutlass Ciera	15.7	31	2.5/L3	486.7
Ford Thunderbird	18.0	27	3.8/L4	486.0
Mercury Cougar	18.0	27	3.8/L4	486.0
Nissan Maxima	18.5	26	3.0/M5	481.0
Buick Regal	16.5	29	3.1/L4	478.5
Oldsmobile Cutlass Supreme	16.5	29	3.1/L4	478.5
Pontiac Grand Prix	16.5	29	3.1/L4	478.5
Cadillac Seville	18.8	25	4.9/L4	470.0
Cadillac Eldorado	18.8	25	4.9/L4	470.0
Ford Taurus	16.0	29	3.0/L4	464.0
Mercury Sable	16.0	29	3.0/L4	464.0
Bentley Turbo R	28.5	16	6.8/L4	456.0
BMW 735i	21.5	21	3.4/L4	451.5
Dodge Dynasty	16.0	28	2.5/L3	448.0
Mazda 929	18.5	24	3.0/L4	444.0
Volvo 740	15.8	28	2.3/L4	442.4
Volvo 940	15.8	28	2.3/L4	442.4
BMW 750iL	24.0	18	5.0/L4	432.0
Hyundai Sonata	15.9	27	2.0/M5	429.3
Chrysler New Yorker	16.0	25	3.3/L4	400.0
Bentley Eight/Mulsanne	28.5	14	6.8/L4	399.0
Rolls-Royce Silver Spirit/Spur	28.5	14	6.8/L4	399.0
Large cars				
Cadillac Brougham	25.0	25	5.0/L4	625.0
Chevrolet Caprice	23.0	26	4.3/L4	598.0
Buick Roadmaster	23.0	25	5.7/L4	575.0
Buick LeSabre	18.0	28	3.8/L4	504.0
Oldsmobile Eighty Eight	18.0	28	3.8/L4	504.0
Pontiac Bonneville	18.0	28	3.8/L4	504.0
Ford Crown Victoria	20.0	25	4.6/L4	500.0
Mercury Grand Marquis	20.0	25	4.6/L4	500.0
Buick Park Avenue	18.0	27	3.8/L4	486.0
Oldsmobile Ninety Eight	18.0	27	3.8/L4	486.0
Lincoln Continental	18.4	25	3.8/L4	460.0
Lincoln Town Car	20.0	23	4.6/L4	460.0
Saab 9000	17.4	26	2.3/M5	452.4
Cadillac Fleetwood/DeVille	18.0	25	4.9/L4	450.0
Dodge Monaco	16.0	26	3.0/L4	416.0
Eagle Premier	16.0	26	3.0/L4	416.0
Chrysler Imperial	16.0	25	3.3/L4	400.0
Small station wagons				
Toyota Camry	18.5	27	2.2/L4	499.5
Subaru Legacy	15.9	30	2.2/M5	477.0
Subaru Loyale	15.9	30	1.8/M5	477.0
Chevrolet Cavalier	15.2	31	2.2/L3	471.2
Honda Accord	17.0	27	2.2/M5	459.0
Ford Escort	11.9	37	1.9/M5	440.3
Mercury Tracer	11.9	37	1.9/M5	440.3
Toyota Corolla	13.2	33	1.6/M5	435.6
Mid-sized station wagons				
Volkswagen Passat	18.5	30	2.0/M5	555.0
Buick Century	15.7	30	3.3/L4	471.0
Oldsmobile Cutlass Cruiser	15.7	30	3.3/L4	471.0
Ford Taurus	16.0	29	3.0/L4	464.0
Mercury Sable	16.0	29	3.0/L4	464.0
Volvo 240	15.8	28	2.3/M5	442.4
Volvo 740	15.8	28	2.3/L4	442.4
Mitsubishi Expo	15.8	27	2.4/M5	426.6
Mitsubishi Expo LRV	14.5	29	1.8/M5	420.5
Plymouth Colt Vista	14.5	29	1.8/M5	420.5
Eagle Summit	14.5	29	1.8/M5	420.5
Volvo 960	15.8	26	2.9/L4	410.8
Mercedes-Benz 300TE	19.0	21	3.0/A4	399.0
Volvo 940	15.8	22	2.3/A4	347.6
Large station wagons				
Buick Roadmaster	22.0	25	5.0/L4	550.0
Chevrolet Caprice	22.0	25	5.0/L4	550.0
Oldsmobile Custom Cruiser	22.0	25	5.0/L4	550.0

NOTES: Model categories based on EPA definitions. Fuel tank capacity supplied by manufacturers. Transmission types: M = manual, A = automatic, L = automatic with lockup device.

AMATI

New luxury cars get sporty image

continued from PAGE 3

at a time when the industry is retrenching somewhat from large powerplants, would be lighter than other V-12s on the market, and would be "environmentally friendly."

The engine is expected to be an all-aluminum, 48-valve 4.0-liter unit, created from a pair of 2.0-liter V-6s. The V-6 is used in the new Eunos 500 sedan introduced last week in Japan. It would be fitted in the Amati flagship sedan, code-named LX12, that is expected to debut in a year.

The Amati franchise was announced by Mazda last summer and is due to begin sales in just over two years in the United States — about 4½ years after Lexus and Infiniti debuted.

"Amati will be more sporty, more emotional in design than Lexus," said Asano.

> The Amati lineup will consist of a full-sized and mid-range sedan.

The Amati lineup will consist of a full-sized and mid-range sedan. He said there are no plans at the moment for a coupe to compete with the Lexus SC400.

Asano said the new 179-inch long Eunos 500 will not come to the United States as an Amati model because, he said, the U.S. market is already overcrowded.

The Eunos 500, which was unveiled at last fall's Tokyo Motor Show as a concept car, goes on sale in Japan Feb. 1 through Mazda's Eunos channel.

Sales are targeted at 2,000 units per month in Japan.

ISUZU

Ads for new Trooper focus on lifestyles

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shared with General Motors, possibly by 1995.

In the meantime, Isuzu's national focus will be aimed at the new Trooper.

"The Trooper is our opportunity to reposition Isuzu in consumers' minds," says Dick Gillmore, director of marketing. "Right now, we don't have a good image or a bad image. (Former advertising pitchman) Joe Isuzu gave us a lot of awareness, but not a lot of intenders.

"Now we've got a clean sheet of paper."

Gillmore says the new image will be more upscale, more intelligent. With Joe Isuzu gone, ads for the Trooper will focus on how the vehicle fits into a customer's life, "like the family pet," he says.

Print ads for the Trooper will be based on the "unwritten laws of driving." In one example, the headline reads, "If there's a hole in the road, you will find it," as it shows a Trooper commuting through city streets. The point, Gillmore says, is to show that the Trooper's four-wheel-drive capability and suspension come in handy whether or not you go off-roading.

Gillmore says research showed that prospective Trooper buyers will use their Troopers more for zipping across town to pick up dry-cleaning, Little Leaguers and co-workers than for wild off-road adventures.

San Francisco-based agency Goodby, Berlin & Silverstein was hired last summer, replacing Della, Femina, McNamee, creater of Joe Isuzu.

The first work from the agency, a retail campaign for the Rodeo, broke last week.

Jerry O'Connor, vice president of marketing, says the new Trooper will also speak to a new group of buyers. While final prices haven't been announced, the new models will begin at about $18,000 and sell for $28,000 fully loaded, the company says. The 1991 Trooper started at about $14,000.

O'Connor says buyers typically will be married and in their late 30s to early 40s, with a $60,000 annual income.

"For some people there will be a pretty big jump if they bought the Trooper back in 1985 or 1986," says O'Connor. "It's our job to convince them to make the leap."

New Trooper is bigger, brawnier

KRISTINE STIVEN BREESE
Staff Reporter

OJAI, Calif. — To hear Isuzu designers tell it, the 1992 Trooper is the Swiss army knife of sport-utilities.

In developing the vehicle, product planners seized on images of classic and enduring designs such as the Swiss army knife, a diver's watch, a London Fog trench coat and a Zippo lighter to inspire solid and simple design ideas.

Designers purposely gave the new Trooper a strong family resemblance to the old model.

What emerged from their labors is the second-generation Trooper. It is bigger, more powerful and more solid than the Trooper that first hit the market in 1984.

Isuzu says the biggest criticism of the old Trooper was lack of power. So the biggest change was made under the hood.

The 1992 Trooper has a new 3.2-liter V-6 engine, replacing the 2.6-liter four-cylinder and 2.8-liter V-6 powerplants in the old line. Both 1992 trim levels have the V-6. The base model uses a single-overhead camshaft unit, and the high-trim version has a double-overhead-cam configuration.

The entry-level Trooper S model develops 175 horsepower at 5,200 rpm and produces 188 pounds-feet of torque at 4,000 rpm. The engine in the LS generates 190 hp at 5,600 rpm and and 195 pounds-feet of torque at 3,800 rpm.

Both models have standard two-speed, part-time four-wheel-drive. The system is similar to that of the old Trooper but now includes automatic locking hub, which enables the driver to shift in and out of 4wd without leaving the vehicle.

But unlike such "shift-on-the-fly" competitors as the Ford Explorer and Mitsubishi Montero, the Trooper must be brought to a stop before being shifted into 4wd.

While its more rounded appearance helps distinguish the new Trooper from the old one, Isuzu designed in a lot of "family resemblance" to the old Trooper and other Isuzu truck products, according to Mark Darling, director of strategic planning at American Isuzu Motors Inc.

"We didn't want it to look like something from Nissan or Toyota," he said.

To take away the tinny feel of the old product, Isuzu improved the suspension, upgraded the seats and thickened the door panels to reduce road noise. The rear suspension now has a four-link coil spring system intended to improve shock absorption. The old system operated with two, non-coil springs.

In addition, the frame was redesigned to give it a 300 percent increase in overall structural rigidity, Isuzu said.

The wheelbase has grown from 104.3 to 108.7 inches, and length has increased from 176 inches to 178.9. The new Trooper is also 3.7 inches wider and 1.1 inches taller than its predecessor.

Isuzu won't have power seats, leather interior or a sunroof on the first models, but all are under development.

The 1992 Trooper will go on sale in early March. Prices will begin at about $18,000 and top out at $28,000 fully loaded. Isuzu hopes to sell 16,000 this year and 30,000 a year eventually.

ISUZU TROOPER FOR 1992

Model	Wheelbase (inches)	Length (inches)	Width (inches)	Height (inches)	Curb Weight (pounds)	Base engine	Drive type	Body styles
Trooper	108.7	178.9	68.7	72.8	4,155	3.2L, V-6	rwd, 4wd	sport-utility

10-DAY CAR AND TRUCK SALES, BY MAKE

	Jan. 11-20, 1992	Jan. 11-20, 1991
ALFA ROMEO (imp. car)*	55	92
Acura (imp. car)	2,883	2,273
Domestic car	8,946	6,490
Imported car	4,221	3,707
Honda	13,167	10,197
AMERICAN HONDA	15,970	12,470
ASTON MARTIN (imp. car)*	2	2
BMW (imp. car)*	1,662	2,059
Domestic car*	2,471	2,723
Imported car*	0	47
Domestic truck*	82	80
Chrysler Division*	2,553	2,850
Domestic car*	6,958	7,669
Imported car*	604	836
Domestic truck*	9,298	9,015
Imported truck*	129	227
Dodge*	16,989	17,747
Domestic car*	724	798
Imported car*	245	224
Eagle*	969	1,023
Domestic truck*	3,592	3,482
Jeep*	3,592	3,482
Domestic car*	4,047	4,460
Imported car*	312	417
Domestic truck*	3,428	3,323
Plymouth*	7,786	8,200
Domestic car*	14,200	15,651
Imported car*	1,161	1,525
Domestic truck*	16,399	15,900
Imported truck*	129	227
CHRYSLER CORP.*	31,889	33,301
Imported car*	129	169
Imported truck*	56	58
DAIHATSU*	185	227
FERRARI (imp. car)*	24	24
Domestic car	20,542	23,803
Imported car	1,114	807
Domestic truck	25,283	22,255
Ford Division	46,939	46,865
Domestic car	2,704	3,019
Lincoln	2,704	3,019
Domestic car	6,739	5,887
Imported car	1,150	1,340
Mercury	7,889	7,227
Domestic car	29,985	32,709
Imported car	2,264	2,147
Domestic truck	25,283	22,255
FORD MOTOR CO.	57,532	57,111
Domestic car	12,353	11,607
Buick	12,353	11,607
Domestic car	3,498	7,115
Cadillac	3,498	7,115
Domestic car	18,566	24,375
Imported car	1,339	1,681
Domestic truck	19,488	21,739
Imported truck	53	68
Chevrolet	39,446	47,863
GMC	5,784	4,654
Domestic car	7,529	8,017
Domestic truck	524	434
Oldsmobile	8,053	8,451
Domestic car	9,389	8,450
Imported car	666	596
Domestic truck	495	376
Pontiac	10,550	9,422
Domestic car	2,624	349
Saturn	2,624	349
Domestic car	53,959	59,913
Imported car	2,005	2,277
Domestic truck	26,211	27,203
Imported truck	53	68
GENERAL MOTORS	82,228	89,461
HYUNDAI*†	2,103	3,910
Imported car*	314	199
Domestic truck	852	504
Imported truck*	2,126	2,826
ISUZU*	3,293	3,529
JAGUAR (imp. car)*	208	551
LAMBORGHINI (imp. car)*	4	4
LOTUS (imp. car)*	8	8
MASERATI (imp. car)*	6	6
Domestic car	1,140	1,311
Imported car*	3,130	2,839
Domestic truck	1,140	253
Imported truck*	2,176	2,591
MAZDA*	7,585	6,995
MERCEDES-BENZ (imp. car)*	1,427	2,747
Domestic car	1,228	1,218
Imported car*	2,107	1,878
Imported truck*	566	1,193
MITSUBISHI*	3,902	4,289
Infiniti	643	923
Domestic car	2,276	2,178
Imported car*	5,800	5,464
Domestic truck	2,307	2,508
Imported truck*	3,667	3,427
Nissan*	14,050	13,576
NISSAN MOTOR CORP.	14,694	14,500
PEUGEOT (imp. car)*	34	104
PORSCHE (imp. car)*	81	240
RANGE ROVER (imp. truck)*	143	158
ROLLS/BENTLEY (imp. car)*	7	30
SAAB (imp. car)*	625	644
STERLING (imp. car)*	8	92
Domestic car	670	684
Imported car*	1,125	1,619
SUBARU*	1,795	2,303
Imported car	92	84
Imported truck	299	275
SUZUKI†	391	359
Lexus (imp. car)	2,163	789
Domestic car	5,630	4,087
Imported car	7,523	6,642
Domestic truck	225	0
Imported truck	5,081	4,561
Toyota	18,459	15,290
TOYOTA MOTOR SALES	20,622	16,079
Audi (imp. car)*	351	405
Imported car*	1,498	2,315
Imported truck*	41	110
Volkswagen*	1,539	2,426
VWoA*	1,890	2,830
VOLVO*†	1,133	1,788
YUGO (imp. car)*	184	75
Domestic car	118,834	124,241
Imported car	44,810	47,741
TOTAL CAR	162,844	171,981
Domestic truck	72,417	68,623
Imported truck	14,338	15,493
TOTAL TRUCK	86,755	84,116
TOTAL CAR & TRK	249,599	256,097

*Estimated †Breakdown of North American built and imported car sales not available.
There were 8 selling days in the period this year and 8 last year.

CHRYSLER

Bond services, Wall St. at odds

continued from PAGE 3

corporation's liquidity."

Chrysler had $2.5 billion in cash at the end of the third quarter. The company had hoped to avert any further lowering of its ratings when it raised $395 million in a common stock offering in September 1991.

Chrysler last week said it was "extremely disappointed" by the downgrades. The company acknowledged the dismal U.S. market and the competition its products face, but termed the downgrades unjustified.

The Fitch downgrade affects securities issued by Chrysler Corp.; Chrysler Financial Corp., its financial services subsidiary, and the Auburn Hills Trust Guaranteed Exchangeable Certificates used to finance the company's new technology center in Auburn Hills, Mich.

The Moody's downgrade affects the debt of Chrysler and Chrysler Financial.

Because Chrysler Financial's rating is linked to that of its corporate parent, the downgradings during the past year have restricted Chrysler Financial's access to commercial paper and have raised its borrowing costs.

"Deterioration in Chrysler's credit quality has adversely affected Chrysler Financial's financial flexibility," said Standard & Poor's. Chrysler Financial "has been unable to access the public debt and commercial paper markets since mid-1990, relying instead for its funding requirements on increased levels of receivable sales and borrowings under bank credit facilities, while curtailing the growth of certain of its non-automotive businesses."

In a prospectus filed with the Securities & Exchange Commission in connection with its common stock offering, Chrysler said that Chrysler Financial's difficulties could become evident by this year.

"Beginning in mid-1992, this reduction of credit would adversely affect Chrysler's fleet sales and its dealers' ability to engage in retail vehicle leasing and would substantially reduce Chrysler Financial's results of operations," Chrysler said in the prospectus.

Chrysler has been unsuccessful in its bid to shore up Chrysler Financial by selling a minority interest in the subsidiary.

INCENTIVE WATCH— DEALER INCENTIVES

NEW PROGRAMS

PORSCHE (1991 models, no expiration date. To qualify for the following rebates, dealers had to buy two cars from port stock by Jan. 17.)

911 Carrera 2, 928	$9,500
911 Carrera 4	$13,500
911 Turbo	$14,00

CONTINUING PROGRAMS

ACURA (1991 models, expires May 1)

Legend sedan	$2,500
Legend coupe	$3,000
Integra (expires Feb. 3)	$500

AUDI (1991 models, no expiration date)

Audi 100 and 200	$1,500
Audi 90	$1,000

Rebates apply to models purchased by dealer from Audi of America port stocks.

BMW (no expiration date)

750iL (1991)	$10,000

GENERAL MOTORS

Chevrolet (expires Feb. 4)	
Caprice (1992)	$250-800, quota
Camaro (1992)	$300-750, quota
Corvette ZR-1 (1992)	$2,000
Other Corvette (1992)	$1,000
Corvette ZR-1 (1991)	$3,000
Other Corvette (1991)	$2,000
Cadillac Allante (1991) (no expiration date)	$7,500 on first sale, $8,500 on additional sales
Pontiac Sunbird	$300

HONDA (1991 models, expires Feb. 2)

Civic, Prelude	$500

ISUZU (No expiration date; 1990-92 models unless otherwise noted. Rebates vary by regions.)

Impulse	$1,300-2,500
Stylus S	$600-800
Stylus S (Calif. only)*	$1,250
Stylus RS	$600-800
Stylus XS (1991, except Calif.)	$1,100
Stylus XS (Calif. only)*	$2,500
Rodeo	0-$850
Trooper (except Calif.)	$750-850
Pickup	$500-1,500
Pickup (1991 4x4, bonus in some regions)	$400

*Dealer has option of sharing rebate with buyer.

LOTUS (1991, no expiration date)

Elan	$5,000
Esprit Turbo	$11,000-15,000

MAZDA (expires Feb. 3)

Protege (1991)	$350
323 (1991)	$500
MPV (1991)	$500
MPV (1992)	$700

MITSUBISHI (1990-92 models, expires Feb. 10. This is the range of regional programs. Some rebates are based on number sold.)

Precis	0-$1,000
Mirage	0-$750
Galant	0-$2,000
Eclipse	0-$2,000
Montero	0-$1,250
Pickup	0-$2,000

NISSAN 300ZX (1991, expires Feb. 2) $2,500-3,500, quota

Sentra (1991-92, expires Feb. 3)	$300
Base model all lines (1991, expires Feb. 3)	$1,700

PEUGEOT (no expiration date)

405	$5,000
505	$6,000

SUBARU (1991, expires March 3)

Legacy	$1,200-1,700

SUZUKI (expires Feb. 3)

Swift (1992)	$400-700
Swift (1991)	$700-1,000
Sidekick (1992)	$200-700
Sidekick (1991)	$700-1,000

TOYOTA (expires Feb. 3)

Corolla (1992)	$600
Pickups (1991-92)	$700-1,200

VOLKSWAGEN (no expiration date)

Passat (1991)	$1,500
Jetta, Fox, Golf (1991)	$500
All 1990 cars	$500-1,500

VOLVO (expires March 31)

1992 models

240 series	$500-1,000
740 series	$1,000-1,500
940 series	$1,500

1991 models

240 series	$1,500
740 series	$1,750-2,500
940 series	$1,500-2,500
780 coupe	$2,500

auctions

CHRYSLER CORP.

Jan. 29 — Manheim Auto Auction, Manheim, Pa.; Minneapolis Auto Auction Inc., Maple Grove, Minn.; and Southern States Vehicle Auction of Atlanta Inc., Newnan, Ga.

Jan. 30 — Fredericksburg Auto Auction Inc., Fredericksburg, Va.; Florida Auto Auction of Orlando, Ocoee, Fla.; Butler Auto Auction, Gibsonia, Pa.; Golden Gate Auto Auction Inc., Fremont, Calif.; and Ark-La-Tex Auto Auction Inc., Shreveport, La.

Jan. 31 — Northway Auto Exchange Inc., Clifton Park, N.Y.; and St. Louis Auto Auction Inc., Bridgeton, Mo.

Feb. 4 — Nashville Auto Auction Inc., Nashville, Tenn.; Southwest Auto Auction Inc., Chandler, Ariz.; South Seattle Auto Auction Inc., Kent, Wash.; Greensboro Auto Auction Inc., Greensboro, N.C.; and San Antonio Auto Auction, San Antonio

FORD MOTOR CO.

Jan. 29 — Baltimore-Washington Auto Exchange, Baltimore; Clanton's Auto Auction, Darlington, S.C.; Fort Worth Auto Auction, Fort Worth, Texas; Mississippi Auto Auction, Hattiesburg, Miss.; and Southern California Auto Auction, Fontana, Calif.

Jan. 30 — Greensboro Auto Auction, Greensboro, N.C.; Interstate Auto Auction, Mercer, Pa.; Salt Lake Auto Auction, Salt Lake City; and St. Louis Auto Auction, Bridgeton, Mo.

Feb. 3 — Lauderdale-Miami Auto Auction, Davie, Fla.; and Texas Hobby Auto Auction, Houston

GENERAL MOTORS

Jan. 29 — American Auto Auction, Boston; Indianapolis Auto Auction Inc., Indianapolis; Metro Auto Auction of Kansas City Inc., Lee's Summit, Mo.; Auto Dealers Exchange of Memphis, Memphis, Tenn.; Golden Gate Auto Auction, Fremont, Calif.; and Statesville Auto Auction, Statesville, N.C.

Jan. 30 — Mid Ark Auto Auction, North Little Rock, Ark.; Denver Auto Auction, Aurora, Colo.; Aptco Auto Auction, Taylor, Mich.; Big H Auto Auction, Houston; Los Angeles Dealers Auto Auction, Rosemead, Calif.; Nashville Auto Auction, Nashville, Tenn.; Butler Auto Auction, Evans City, Pa.; Portland Auto Auction, Portland, Ore.; and State Line Auto Auction, Waverly, N.Y.

Feb. 4 — Southern Auto Auction, East Windsor, Conn.; Dallas Auto Auction, Dallas; Dothan Auto Auction, Dothan, Ala.; Fresno Auto Auction, Fresno, Calif.; Manheim Auto Auction, Manheim, Pa.; Minneapolis Northstar Auto Auction Inc., Shakopee, Minn.; Auto Auction of Billings, Billings, Mont.; and Florida Auto Auction of Orlando, Ocoee, Fla.

MAZDA MOTOR OF AMERICA INC.

Jan. 28 — Nashville Auto Auction, Nashville, Tenn.

Jan 30 — Manheim Auto Auction, Manheim, Pa.

Feb. 5 — Golden Gate Auto Auction, Fremont, Calif.

Feb. 6 — Greater Chicago Auto Auction, Chicago

MERCEDES-BENZ CREDIT CORP.

Jan. 29 — Atlanta Auto Auction, Red Oak, Ga.

Jan. 30 — Riverside Auto Auction, Riverside, Calif.

MITSUBISHI MOTOR SALES OF AMERICA

Jan. 30 — Newburgh Auto Auction, Newburgh, N.Y.; Atlanta Auto Auction, Red Oak, Ga.; and Texas Hobby Auto Auction, Houston

Feb. 4 — Atlanta Auto Auction, Red Oak, Ga.

Feb. 5 — Southern California Auto Auction, Fontana, Calif.

Feb. 6 — Greensboro Auto Auction, Greensboro, N.C.

Feb. 10 — Dallas Auto Auction, Dallas

NISSAN MOTOR MANUFACTURING CORP. U.S.A.

Jan. 29 — Dealers Auto Auction, Grand Prairie, Texas

Feb. 12 — Atlanta Auto Auction, Red Oak, Ga.

SUBARU OF AMERICA

Jan. 29 — Butler Auto Auction, Evans City, Pa.

Jan. 30 — Southern California Auto Auction, Fontana, Calif.

Jan. 31 — Fort Lauderdale/Miami Auto Auction, Davie, Fla.

TOYOTA MOTOR SALES U.S.A.

Jan. 30 — Greater Tampa Bay Auto Auction, Tampa, Fla.; and St. Louis Auto Auction, Bridgeton, Mo.

VW CREDIT INC.

Jan. 29 — Atlanta Auto Auction, Red Oak, Ga.

Jan. 31 — Florida Auto Auction of Orlando, Ocoee, Fla. (closed sale — for VW and Audi dealers only)

Porsche pays $14,000 dealer rebate

Porsche Cars North America Inc. is paying dealer incentives of up to $14,000 on 1991 cars, and Hyundai Motor America has announced new consumer rebates on 1991 and 1992 models.

Under the **Porsche** program, dealers who bought at least two Porsche cars out-of-port from Jan. 7-17, will earn up to $14,000 on subsequent sales of 911s and $9,500 on 928s.

The Porsche rebate program runs indefinitely.

Through April 2, **Hyundai** is offering the following retail rebates: 1992 Sonata, $750; 1992 Elantra, $500; 1991 Sonata, $1,500; 1991 Excel, $1,000, and 1991 Scoupe, $750.

INCENTIVE WATCH — CUSTOMER INCENTIVES

CONTINUING PROGRAMS

CHRYSLER CORP.

Expires Jan. 31. Finance rates in lieu of rebates run from 0 to 9.9 percent on Sundance, Shadow, Acclaim, Spirit, LeBaron sedan and Cherokee, and from 4.9 to 9.9 percent on other models.

1990-92 models

NATIONAL REBATES

Chrysler Imperial	$2,000
Dodge Monaco	$1,500
Shadow	$1,000
Colt 3-door	$500
Dodge Ramcharger	$2,000
Eagle Premier	$1,500
Talon	$1,000
Summit 3-door	$500
Jeep Comanche	$750
Wrangler	$500
Plymouth Laser, Sundance	$1,000
Colt 3-door	$500

REGIONAL REBATES: Northeast

Chrysler LeBaron sedan	$1,500
Dodge Spirit	$1,500
Dodge Dakota	$1,000
Jeep Cherokee	$1,500
Plymouth Acclaim	$1,500
All Chrysler Corp. minivans	$1,000

REGIONAL REBATES: Central, West

Chrysler New Yorker Fifth Avenue	$1,500
New Yorker Salon, LeBaron sedan	$1,000
Dodge Dynasty, Spirit	$1,000
Dodge Ram gas pickup (Central only)	$1,500
Ram wagon	$1,000
Dakota	$750
Dodge Ram gas pickup (West only)	$750
Ram 50 pickup	$500
Jeep Cherokee	$1,500
Plymouth Acclaim	$1,000
All Chrysler Corp. minivans	$500

FORD MOTOR CO.

1992 models

Expires Feb. 4 unless otherwise noted. In lieu of rebates, finance rates of 2.9 to 7.9 percent are offered. Finance rates differ by vehicle lines and regions. No finance rate incentives on Lincoln models.

Ford Festiva, Tempo, Taurus	$500
Escort (regional programs)	$500-750
Mustang, Thunderbird	$750
Probe, Taurus SHO, Crown Victoria	$1,000
F series, Aerostar	$500
Ranger	$750
Aerostar (Northeast), Bronco, Econoline (RV pkg.)	$1,000
Mercury Topaz, Sable	$500
Tracer (regional programs)	$500-750
Capri, Cougar	$750
Grand Marquis	$1,000
Lincoln Town Car, Mark VII, Continental (expires March 3)	$1,500

Pre-1992 models

1990-91 Ford Division models and 1991 Lincoln-Mercury models. Expires Feb. 4. In lieu of rebates, finance rates of 2.9 to 7.9 percent are offered. Finance rates differ by vehicle line and region.

Ford Tempo, Taurus	$400
Taurus SHO	$600
Escort, Mustang, Thunderbird	$750
Festiva, Probe	$1,000
Ranger, F series, Aerostar, Econoline (except E-150 RV)	$400
Aerostar (Northeast), Bronco, Econoline E-150 (RV pkg.)	$1,000
Mercury Topaz, Sable	$400
Tracer, Cougar	$750
Capri	$2,000

GENERAL MOTORS

Expires Feb. 4 unless otherwise noted. Finance rates in lieu of rebates start at 2.9 percent for Buick, Oldsmobile and Pontiac; 6.9 percent for Chevrolet and GMC.

1992 models

Buick Skylark*	$250-750*
Century, Regal*	$250-1,000*
Riviera	$2,000
Cadillac (expires March 31) DeVille, Fleetwood, Brougham	$1,500
Chevrolet Caprice	$1,000
Geo Metro and Storm	$750
Geo Prizm, Camaro, Beretta, Lumina	$500
Cavalier	$500
G van, S/T Blazer, Lumina APV	$1,000
Geo Tracker, Astro, S/T pickup	$750
C/K pickup	$500
GMC G-van, S15 Jimmy (except Typhoon)	$1,000
Sonoma (except Syclone, GT), Safari	$750
Sierra (except Crew Cab)	$500
Oldsmobile Cutlass Ciera (national)	$1,000
Regional programs, various models	$500-2,000
Pontiac Trans Sport	$1,000
Grand Prix	$750
LeMans, Firebird	$500

*Based on option package selected.

1991 models

Chevrolet Caprice	$1,000
Geo Metro, Camaro	$750
Geo Storm and Prizm, Beretta, Lumina	$500
Cavalier, Corsica	$300
V Blazer, Suburban, G-van, S/T Blazer, Lumina APV	$1,000
Geo Tracker, Astro, S/T pickup, R/V and C/K pickups	$500
GMC V Jimmy, Suburban	$1,500
S15 Jimmy, G-van, Safari	$1,000
Sonoma (except Syclone)	$750
Sierra, R/V pickups	$500
Oldsmobile - regional programs, various models	$500-2,000
Pontiac Trans Sport, LeMans, Firebird	$1,000
Grand Prix	$750

MAZDA (expires Feb. 3)

Protege (1991)	$1,000
Protege (1992)	$500
Navajo (1991)	$1,000

MITSUBISHI (expires Feb. 10)

Precis/Mirage (1990-92) Southwest	$500
West	$750
Galant (1990-92) West	$750
Pickups (1991-92) Southwest	$1,000

SUBARU (expires March 3)

Loyale (1991-92, fwd sedan, awd wagon)	$500
Legacy L, L Plus (1992)	$500

Ford boosts exports of Explorers

KATHY JACKSON
Staff Reporter

Ford Motor Co. plans to export at least 6,000 Ford Explorers to Europe next year, up from the 900 last year.

The company also will establish its first on-site plant homologation center where all necessary modifications will be made before the sport-utilities are shipped. The $500,000 center will be near the Louisville, Ky., assembly plant, which builds the Explorer.

Robert Sparvero, general manager for export sales at Ford, says the company currently exports Explorers to five countries in Europe — Belgium, the Netherlands, Sweden, Finland and Switzerland. Ford also shipped 4,000 Explorers to countries other than Europe last year.

Sparvero said most of the Explorer growth will come from four of the bigger European markets, four large markets that do not use right-hand drive vehicles.

Sparvero says the on-site homologation center will make the modification process quicker and more cost efficient for Ford. He says about 75 percent of the modifications are made on the line at the assembly plant. Workers at the center will add things such as license plate brackets and front and rear tow hooks.

Including Explorer, Ford exported 51,500 vehicles last year, and its export division had revenues of $1 billion. "A billion dollar business is a significant business," Sparvero said.

GM enlists aid of science labs

WARREN, Mich. — General Motors last week hosted 180 representatives of 11 national laboratories for three days of meetings to explore ways the domestic auto industry can use the vast scientific resources of the labs to win what they dubbed the "economic cold war."

More than 1,000 GM employees participated in what is believed to be the first coordinated, cooperative effort between business and the labs.

Initial efforts with the national labs are focusing on energy, the environment, safety, agile manufacturing, manufacturing validation and ultra-reliability, said Donald Runkle, GM vice president of advanced engineering.

Canada dealers study competition

The Federation of Automobile Dealers Associations in Canada has launched a study to look at the competitiveness of Canadian dealers vis-a-vis U.S. dealers.

Ken Graydon, executive vice president of the association, says the purpose of the study is:

- To determine if Canadian dealers can effectively compete with U.S. dealers as the U.S.-Canada Free Trade Agreement makes it easier for consumers to shop on both sides of the border.
- And to examine what impact U.S. program cars will have on the Canadian new-car market when the age restriction on used cars imported into Canada is dropped next year.

SCHEDULED PLANT CLOSINGS

Plant	Weeks down	Units lost/ week
CHRYSLER		
Bramalea, Ontario	†	
Toledo, Ohio	1/27	
Jeep Cherokee		4,250
Jeep Comanche		125
Jeep Grand Cherokee		5
FORD MOTOR CO.		
Atlanta	1/27	5,200
Ford Taurus		
Mercury Sable		
Chicago	1/27	5,200
Ford Taurus		
Mercury Sable		
Michigan Truck	1/27, 2/3	2,900
Ford Bronco		
Ford F-series pickup		
Wixom, Mich.	1/27	4,200
Lincoln Continental		
Lincoln Mark VII		
Lincoln Town Car		
GENERAL MOTORS		
Hamtramck, Mich. (V line)	1/27, 2/3	
Cadillac Allante		60
Wentzville, Mo.	1/27	
Buick Park Ave.		1,900
Oldsmobile Eighty Eight		1,700
Pontiac Bonneville		2,900
Van Nuys, Calif.	1/27, 2/3	
Chevrolet Camaro		1,300
Pontiac Firebird		600
Oshawa, Ontario (No. 1)	1/27, 2/3	
Chevrolet Lumina		3,000
Oshawa, Ontario (No. 2)	1/27, 2/3	
Chevrolet Lumina		3,000
Buick Regal		3,000
Total U.S. car		23,060
Total U.S. truck		7,280
Total Canadian car		9,000
Total units lost week of 1/27		39,340

†Plant closed for retooling until spring 1992.
Source: Automotive News Data Center

Design law supporters begin new campaign

MAX GATES
Staff Reporter

WASHINGTON — Backers of a design copyright law, including the auto industry, will try again to pass legislation that would prevent "knock-offs" of American product designs.

A House subcommittee on intellectual property has scheduled a hearing on the bill for Wednesday.

The bill would provide 10 years of copyright protection for original product designs.

This time, the bill's backers are hoping to broaden support by offering an amendment that restricts the bill's auto industry impact to fenders, hoods and doors.

Cheap imitation parts, many coming from Taiwan and other Pacific Rim nations, often don't have the quality or the fit of original parts, said Anne Carlson, a lobbyist with the Motor Vehicle Manufacturers Association.

Auto insurance companies often force car owners to use these parts in crash repairs to lower costs, Carlson said. But pirated parts "are not only stealing American designs, they are also stealing American jobs," she said.

The Coalition for Competitive Repair Parts and the Coalition for Auto Repair Equity oppose the bill, calling it anti-consumer and anti-competitive.

The opponents say chief beneficiaries of the bill will be large corporations and lawyers.

U.S. AND CANADA CAR AND TRUCK PRODUCTION

Vehicles are domestic unless noted. Vehicles are cars unless noted.

	Est. 1/26-1/25/92	Actual 1/13/-1/18/92	1/1-1/25/92	Year 1/1-1/25/92	Year 1/1-1/26/91
LeBaron J	1,040	0	2,641	2,641	900
New Yorker	800	767	1,567	1,567	1,066
Fifth Avenue	700	632	1,332	1,332	2,855
Imperial	240	238	478	478	866
Town & Country (trk.)	120	102	275	275	102
Total Chrysler	**2,900**	**1,739**	**6,293**	**6,293**	**5,789**
Sundance	900	0	900	900	0
Acclaim	1,600	0	3,702	3,702	8,264
Voyager (trk.)	800	728	1,955	1,955	6,014
Voyager (Can. trk.)	2,868	1,905	8,739	8,739	8,246
Total Plymouth	**6,168**	**2,633**	**15,296**	**15,296**	**22,524**
Daytona	500	0	500	500	300
Shadow	1,800	0	1,800	1,800	0
Dynasty	2,000	2,150	4,150	4,150	11,715
Spirit	1,200	0	4,112	4,112	8,274
Viper	0	0	0	0	0
Monaco (Can.)	0	0	0	0	0
Caravan (trk.)	1,375	1,063	3,035	3,035	7,017
Caravan (Can. trk.)	3,570	3,412	12,641	12,641	10,684
Caravan C/V (trk.)	14	12	37	37	184
Caravan C/V (Can. trk.)	162	177	492	492	326
Dakota (trk.)	2,200	1,628	3,863	3,863	3,109
Ram pickups (trk.)	1,100	807	1,907	1,907	3,127
Ram Wagon (Can. trk.)	0	585	1,410	1,410	0
Ram Van (Can. trk.)	0	1,211	3,148	3,148	0
Total Dodge	**13,921**	**11,845**	**37,095**	**37,095**	**44,736**
Premier (Can.)	0	0	0	0	0
Cherokee (trk.)	3,900	2,696	6,596	6,596	0
Comanche (trk.)	120	79	199	199	0
Grand Cherokee (trk.)	28	31	59	59	0
Wagoneer (trk.)	16	16	32	32	0
Wrangler (Can trk.)	1,600	1,545	5,360	5,360	2,507
Total Jeep-Eagle	**5,664**	**4,387**	**12,246**	**12,246**	**2,507**
Total U.S. car	**10,780**	**3,757**	**21,182**	**21,182**	**34,240**
Total Can. car	**0**	**0**	**0**	**0**	**0**
Total U.S. truck	**9,673**	**7,162**	**17,958**	**17,958**	**19,553**
Total Can. truck	**8,200**	**8,835**	**31,790**	**31,790**	**21,763**
CHRYSLER CORP.	**28,653**	**19,784**	**70,930**	**70,930**	**75,556**
Escort	4,599	0	4,599	4,599	13,005
Mustang	2,203	0	2,203	2,203	2,190
Tempo	2,639	3,007	5,646	5,646	7,656
Tempo (Can.)	3,823	3,333	7,156	7,156	5,373
Taurus	6,140	7,469	24,413	24,413	16,330
Thunderbird	1,199	951	2,150	2,150	1,344
Crown Victoria (Can.)	0	2,031	2,031	2,031	2,560
Aerostar (trk.)	3,130	4,025	7,155	7,155	9,592
Bronco (trk.)	564	512	1,076	1,076	572
Explorer/Bronco II (trk.)	5,287	6,214	19,893	19,893	17,308
Navajo (trk.)	58	62	234	234	1,359
Econoline (trk.)	3,569	2,023	9,514	9,514	5,110
Heavies (trk.)	832	1,033	1,865	1,865	2,694
Light trucks (trk.)	9,322	9,034	25,161	25,161	14,081
Light trucks (Can. trk.)	9,322	9,034	18,356	18,356	4,597
Ranger (trk.)	5,799	1,714	9,823	9,823	15,823
Total Ford Div.	**58,486**	**50,442**	**141,275**	**141,275**	**119,594**
Topaz	881	1,111	1,992	1,992	2,904
Topaz (Can.)	938	925	1,863	1,863	1,638
Cougar	809	632	1,441	1,441	2,031
Sable	2,251	2,752	8,973	8,973	4,653
Grand Marquis (Can.)	0	2,082	2,082	2,082	0
Total Mercury	**4,879**	**7,502**	**16,351**	**16,351**	**11,226**
Continental	787	793	1,580	1,580	4,101
Mark VII	164	99	263	263	713
Town Car	2,377	2,390	4,767	4,767	9,666
Total Lincoln	**3,328**	**3,282**	**6,610**	**6,610**	**14,480**
Total L-M Div.	**8,207**	**10,784**	**22,961**	**22,961**	**25,706**
Total U.S. car	**24,049**	**19,204**	**58,027**	**58,027**	**64,593**
Total Can. car	**4,761**	**8,371**	**13,132**	**13,132**	**9,571**
Total U.S. truck	**28,561**	**24,617**	**74,721**	**74,721**	**66,539**
Total Can. truck	**9,322**	**9,034**	**18,356**	**18,356**	**4,597**
FORD MOTOR CO.	**66,693**	**61,226**	**164,236**	**164,236**	**145,300**
Skylark	908	981	3,645	3,645	8,494
Century	1,269	1,558	2,827	2,827	3,094
Regal (Can.)	2,200	2,236	4,436	4,436	9,759
Riviera	169	123	711	711	442
Park Avenue/Electra	1,533	1,769	3,302	3,302	6,906
LeSabre	2,791	2,733	9,837	9,837	13,549
Roadmaster Sedan*	1,027	1,259	4,048	4,048	0
Roadmaster Wagon†	297	297	850	850	0
Reatta	0	0	0	0	0
Total Buick	**10,194**	**10,956**	**29,656**	**29,656**	**42,244**
Eldorado	794	645	2,558	2,558	528
Seville	810	653	2,664	2,664	1,054
Brougham	440	539	1,741	1,741	1,811
DeVille	0	0	0	0	10,654
Allante	0	0	0	0	218
Total Cadillac	**2,044**	**1,837**	**6,963**	**6,963**	**14,265**
Cavalier	3,540	4,296	11,855	11,855	19,371
Camaro	1,098	1,223	4,241	4,241	4,132
Corsica-Beretta	3,904	4,653	15,126	15,126	14,987
Lumina (Can.)	6,250	6,340	12,590	12,590	14,355
Caprice	1,802	1,855	5,820	5,820	8,215
Corvette	0	0	0	0	1,624
Astro (trk.)	2,622	3,110	10,669	10,669	5,878
Blazer (trk.)	252	157	885	885	361
Lumina APV (trk.)	1,280	0	1,280	1,280	2,395
Mediums (trk.)	99	118	485	485	685
P-Model (trk.)	379	353	732	732	677
Pickups (trk.)	2,790	146	3,101	3,101	11,582
Pickups (Can. trk.)	3,800	3,629	12,895	12,895	10,831
S10 (trk.)	4,276	4,086	10,069	10,069	20,962
S10 Blazer (trk.)	2,551	2,912	8,329	8,329	2,967
Sportsvan (trk.)	574	889	2,695	2,695	1,793
Sportsvan (Can. trk.)	900	869	3,517	3,517	547
Suburban (trk.)	498	833	2,366	2,366	1,282
Total Chevrolet	**36,415**	**35,469**	**106,655**	**106,655**	**122,664**
Achieva/Calais	2,256	2,293	7,607	7,607	6,045
Cutlass Ciera	2,686	3,307	5,993	5,993	3,254
Cutlass Ciera (Can.)	0	0	0	0	6,082
Cutlass Supreme	1,890	2,259	4,149	4,149	7,272
Toronado	114	84	445	445	246
Eight Eight	1,578	1,598	5,114	5,114	6,182
Custom Cruiser Wag.††	119	108	341	341	0
Ninety Eight	0	0	0	0	6,313
Silhouette (trk.)	492	0	492	492	625
Bravada (trk.)	349	376	1,138	1,138	1,557
Total Oldsmobile	**9,484**	**10,025**	**25,279**	**25,279**	**37,576**
Sunbird	1,708	2,098	5,748	5,748	8,330
Grand Am	3,912	4,695	14,915	14,915	8,632
Firebird	496	537	1,868	1,868	918
Grand Prix	2,680	3,196	5,876	5,876	5,702
Pontiac 6000	0	0	0	0	2,217
Bonneville	2,332	2,920	5,252	5,252	3,054
Trans Sport (trk.)	584	0	584	584	1,320
Total Pontiac	**11,712**	**13,446**	**34,243**	**34,243**	**30,173**
Yukon/Jimmy (trk.)	100	108	342	342	125
Mediums (trk.)	372	454	1,485	1,485	1,260
P-Model (trk.)	35	36	71	71	181
Pickups (trk.)	790	71	966	966	4,072
Pickups (Can. trk.)	1,500	1,538	5,076	5,076	4,172
Syclone/Sonoma (trk.)	570	1,766	2,510	2,510	4,996
Typhoon/S15 Jimmy (trk.)	674	883	2,374	2,374	1,973
Safari (trk.)	877	1,052	3,503	3,503	2,503
Suburban (trk.)	399	119	902	902	699
Vandura (trk.)	736	737	2,490	2,490	385
Vandura (Can. trk.)	1,000	1,083	3,126	3,126	353
Total GMC	**7,053**	**7,847**	**22,845**	**22,845**	**20,719**
Total Saturn*	**2,388**	**2,948**	**9,464**	**9,464**	**2,300**
Total U.S. car	**42,541**	**48,627**	**135,997**	**135,997**	**155,544**
Total Can. car	**8,450**	**8,576**	**17,026**	**17,026**	**30,196**
Total U.S. truck	**21,299**	**18,206**	**57,468**	**57,468**	**68,298**
Total Can. truck	**7,000**	**7,119**	**24,614**	**24,614**	**15,903**
GENERAL MOTORS	**79,298**	**82,529**	**235,105**	**235,106**	**269,941**
Can. car	2,300	2,300	7,939	7,939	9,339
Can. trk.	1,400	1,400	4,865	4,865	4,032
CAMI*	**3,700**	**3,700**	**12,804**	**12,804**	**13,371**
DIAMOND-STAR*	**2,796**	**3,113**	**9,932**	**9,932**	**11,118**
Civic	1,800	1,486	5,823	5,823	5,881
Civic (Can.)	2,420	1,968	7,398	7,398	7,628
Accord	8,465	6,616	26,026	26,026	25,556
Total U.S. car	**10,265**	**8,102**	**31,849**	**31,849**	**31,437**
Total Can. car	**2,420**	**1,968**	**7,398**	**7,398**	**7,628**
HONDA	**12,685**	**10,070**	**39,247**	**39,247**	**39,065**
HYUNDAI Sonata (Can.)	320	407	1,096	1,096	3,370
MAZDA*	**1,785**	**1,764**	**6,572**	**6,572**	**9,862**
U.S. trk.	1,695	1,454	5,428	5,428	4,598
Can. trk.	165	130	516	516	497
NAVISTAR	**1,860**	**1,584**	**5,944**	**5,944**	**5,095**
Sentra	2,930	2,849	10,198	10,198	11,138
Pickup (trk.)	2,816	2,787	9,905	9,905	10,689
NISSAN	**5,746**	**5,636**	**20,103**	**20,103**	**21,827**
Geo Prizm	1,600	2,063	6,401	6,401	7,333
Toyota Corolla	1,840	2,531	7,689	7,689	7,258
Toyota Hilux (trk.)	360	480	1,465	1,465	0
NUMMI	**3,800**	**5,074**	**15,555**	**15,555**	**14,591**
Legacy	1,184	997	3,927	3,927	3,836
Pickup (trk.)	518	471	1,696	1,696	0
Rodeo (trk.)	852	774	2,983	2,983	0
Total U.S. car	**1,184**	**997**	**3,927**	**3,927**	**3,836**
Total U.S. trk.	**1,370**	**1,245**	**4,679**	**4,679**	**3,701**
SUBARU-ISUZU	**2,554**	**2,242**	**8,606**	**8,606**	**7,537**
Camry	4,600	5,462	16,566	16,566	16,287
Corolla (Can.)	1,300	1,337	4,211	4,211	4,876
TOYOTA	**5,900**	**6,799**	**20,777**	**20,777**	**21,163**
VOLVO 740, 940 (Can.)	150	150	494	494	629
AM GENERAL (trk.)	300	375	1,200	1,200	1,650
MISCELLANEOUS (trk.)**	1,920	2,400	7,680	7,680	10,950
Total U.S. car	**184,370**	**90,400**	**308,340**	**308,340**	**352,646**
Total Canada car	**19,701**	**23,109**	**51,296**	**51,296**	**65,609**
Total U.S.-Canada Car	**124,071**	**121,608**	**359,636**	**359,636**	**418,255**
Total U.S. truck	**67,994**	**58,726**	**180,504**	**180,504**	**185,978**
Total Canada truck	**26,087**	**26,518**	**80,141**	**80,141**	**46,792**
Total U.S.-Canada truck	**94,081**	**85,244**	**260,645**	**260,645**	**232,770**
TOTAL U.S.	**172,364**	**157,225**	**488,844**	**488,844**	**538,624**
TOTAL CANADA	**45,788**	**49,627**	**131,437**	**131,437**	**112,401**
TOTAL U.S.-CANADA CAR & TRUCK	**218,152**	**206,852**	**620,281**	**620,281**	**651,025**

*Estimate †1990 totals reflect LeSabre (rwd) ††1990 totals reflect Olds. 88 (rwd)

*CAMI includes Geo Metro and Suzuki Swift cars and Geo Tracker and Suzuki Sidekick trucks; Diamond-Star includes Eagle Summit and Talon, Mitsubishi Eclipse and Mirage and Plymouth Laser; Mazda includes MX-6, 626 and Ford Probe.

**Estimates for Mack, Volvo-White, Kenworth, Peterbilt, Freightliner, Mercedes-Benz.

May contain error of one or two units due to rounding.

Output up despite holiday

ANNE E. WRIGHT
Chief Statistician

Despite the holiday-shortened work week, estimated U.S. car and truck production rose 9.6 percent over the prior week and 16.6 percent over the year-ago week.

All U.S. assembly plants were closed last Monday in observance of Martin Luther King Day. Estimated car production was up 6.0 percent over the prior week and 11.1 percent over the 1991 week.

Last week's estimated truck production was up 15.8 percent over the prior week and was 26.1 percent over the year-ago week.

Car and truck production in Canada fell 7.7 percent from the prior week but rose 43.0 percent over the same week in 1991.

Canadian carmakers' estimated production last week was 14.7 percent below the prior week but was 6.2 percent above the 1991 week.

Last week's estimated truck production in Canada slipped 1.6 percent from the prior week but topped last year by 93.7 percent.

U.S. and Canadian automakers' daily build rate was 54,538 last week, an increase of 31.8 percent over the prior five-day week. The year-ago work week was also four days with a daily rate of 44,965.

Last week's estimated car production in the United States was split as follows: General Motors, 40.9 percent; Ford Motor Co., 23.0; Chrysler Corp., 10.3 percent; Honda of America Manufacturing Inc., 9.8 percent; Toyota Motor Manufacturing U.S.A. Inc., 4.4 percent; New United Motor Manufacturing Inc., 3.3 percent; Nissan Motor Manufacturing Corp. U.S.A., 2.8 percent; Diamond-Star Motors Corp., 2.7 percent; Mazda Motor Manufacturing (USA) Corp., 1.7 percent and Subaru-Isuzu Automotive Inc., 1.1 percent.

GM scheduled overtime last Saturday at the Scarborough, Ontario; Oshawa, Ontario, and Baltimore truck facilities. The postal line at the Moraine, Ohio, truck facility was scheduled to work one shift of Saturday overtime.

At GM's Janesville, Wis., truck facility, two shifts of Friday overtime and one shift on Saturday were scheduled last week for all lines except the medium-duty truck line, which was scheduled for just one shift on Saturday.

The company extended the downtime for one week on the Allante line at the Detroit-Hamtramck, Mich., plant. Production is scheduled to resume Feb. 10.

Ford scheduled daily and Saturday overtime last week at the Louisville, Ky., and Kansas City, Mo. truck plants.

Chrysler's St. Louis plant in Fenton, Mo., was scheduled to work three shifts of overtime last Saturday. The Dodge City (Warren, Mich.) truck facility worked daily overtime in addition to two shifts on Saturday.

Chrysler's Toledo, Ohio, Jeep facility was scheduled to work five hours of overtime last Saturday to make up production that was lost due to a heavy snowfall the previous week.